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=> fil reg COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 14 NOV 2002 HIGHEST RN 473658-67-2 DICTIONARY FILE UPDATES: 14 NOV 2002 HIGHEST RN 473658-67-2

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

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=>
Uploading 10007342b.str

L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR

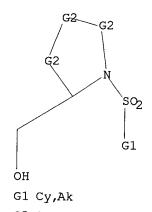
10007342Page 3 11/15/2002

Structure attributes must be viewed using STN Express query preparation.

=>
Uploading 10007342b.str

L2 STRUCTURE UPLOADED

=> d L2 HAS NO ANSWERS L2 STR



G2 C,S

Structure attributes must be viewed using STN Express query preparation.

4331 ANSWERS

=> s 12 full FULL SEARCH INITIATED 15:03:43 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 16165 TO ITERATE

100.0% PROCESSED 16165 ITERATIONS SEARCH TIME: 00.00.04

L3 4331 SEA SSS FUL L2

Examiner Anderson 703-605-1157

10007342Page 4 11/15/2002

=> s l1 full

FULL SEARCH INITIATED 15:03:58 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 641 TO ITERATE

100.0% PROCESSED 641 ITERATIONS

27 ANSWERS

SEARCH TIME: 00.00.01

L4 27 SEA SSS FUL L1

=>

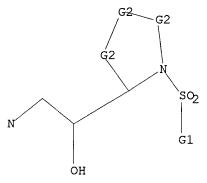
Uploading 10007342b.str

L5 STRUCTURE UPLOADED

=> d

L5 HAS NO ANSWERS

L5 STR



G1 Cy,Ak G2 C,S

Structure attributes must be viewed using STN Express query preparation.

=> s 15 subset=13 full

FULL SUBSET SEARCH INITIATED 15:04:52 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED - 4 TO ITERATE

100.0% PROCESSED

4 ITERATIONS

2 ANSWERS

SEARCH TIME: 00.00.01

L6

2 SEA SUB=L3 SSS FUL L5

=> d scan

# 10007342Page 5 11/15/2002

L6 2 ANSWERS REGISTRY COPYRIGHT 2002 ACS
L-Phenylalanine, N-{hydroxy[(2S)-1-[(4-methylphenyl)sulfonyl]-2-pyrrolidinyl]acetyl]-4-[(4-piperidinylcarbonyl)smino]- (SCI)
MF C28 H36 N4 07 S

Absolute stereochemistry.

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L6 2 ANSWERS REGISTRY COPYRIGHT 2002 ACS
IN 1-Piperidinecarboxylic acid, 4-[[(4-[(25)-2-carboxy-2-[[hydroxy[(25)-1-[(4-methylphenyl)] sulfonyl]-2-pyrrolidinyl] acetyl] amino] ethyl] phenyl] amino] carb onyl]-, 1-[phenylmethyl] ester (9CI)
MF C36 H42 N4 09 5

Absolute stereochemistry.

PAGE 1-B

~ ph

\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

ALL ANSWERS HAVE BEEN SCANNED

10007342Page 6 11/15/2002

=> fil caplus COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 314.37 314.58

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FILE COVERS 1907 - 15 Nov 2002 VOL 137 ISS 21 FILE LAST UPDATED: 14 Nov 2002 (20021114/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> s 16 L7 1 L6

=> d ibib abs hitstr

### 10007342Page 7 11/15/2002

L7 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:513717 CAPLUS
DOCUMENT NUMBER: 133:12995
TITLE: Compounds which inhibit leukocyte adhesion mediated by VLA-4 VLA-4
Ashwell, Susan; Baudy, Reinhardt Bernhard; Pleiss,
Michael A.; Sarantakis, Dimitrios; Thorsett, Eugene D.
Elan Pharmaceuticals, Inc., USA; American Home
Products Corporation
PCT Int. Appl., 163 pp.
CODEN: PIXXD2
Patent INVENTOR(S): PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION: WO 2000043415 A1 20000727 WO 2000-US1603 20000121
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IM, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LK, LS, LT, LU, LV, MD, MG, MK, MM, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SX, SL, TJ, TH, RT, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TH
RW: GH, GM, KE, LS, MY, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, LT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GW, ML, MR, NE, SN, TD, TG
EP 1150997 A1 20011107
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
US 6136904 B1 20020820
PRIORITY APPLN. INFO: KIND DATE ---- 20000727 PATENT NO. APPLICATION NO. DATE

R: AT, BE, CH, DE, DX, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

US 6436904 B1 20020820 US 2000-489589 20000121

PRIORITY APPIN. INFO: US 1999-183055P P 19990125

US 1999-237473 A1 19990125

US 1999-237473 A1 19990125

OTHER SOURCE(S): MARPAT 133:129895

AB Compds. are disclosed which bind VLA-4. Certain of these compds. also inhibit leukocyte adhesion and, in particular, leukocyte adhesion mediated by VLA-4. The compds. are usseful in the treatment of inflammatory diseases in a mammalian patient, e.g., human, such as asthma, Alzheimer's disease, atherosclerosis, AIDS dementia, diabetes, inflammatory bowel disease, rheumactoid arthritis, tissue transplantation, tumor metastasis and myocardial ischemia. The compds. can also be administered for the treatment of inflammatory brain diseases such as multiple sclerosis. Prepn. of compds. of the invention, e.g. N-[N-(Toluene-4-sulfonyl)-L-pyrcolidin-2-ylmethy]-L-phenylalanien, is described.

IT 206454-56-69

RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SFN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(VLA-4-mediated leukocyte adhesion inhibitors, prepn., and therapeutic use)

use) 2.500 (1996)

L7 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS (Continued)

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS (Continued) onyl]-, 1-(phenylmethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-B

~<sub>Ph</sub>

286454-57-7P
RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)

(VLA-4-mediated leukocyte adhesion inhibitors, prepn., and therapeutic

RN 286454-57-7 CAPLUS
CN L-Phenylaland

L-Phenylalanine, N-[hydroxy[(2S)-1-[(4-methylphenyl)sulfonyl]-2-pyrrolidinyl]acetyl]-4-[(4-piperidinylcarbonyl)amino]- (9CI) (CA INDEX NAME)

10007342Page 8 11/15/2002

=> fil reg

COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST

5.58
320.16

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE
ENTRY
SESSION
-0.62
-0.62

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STRUCTURE FILE UPDATES: 14 NOV 2002 HIGHEST RN 473658-67-2 DICTIONARY FILE UPDATES: 14 NOV 2002 HIGHEST RN 473658-67-2

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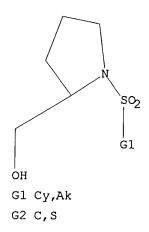
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=>
Uploading 10007342b.str

L8 STRUCTURE UPLOADED

=> d L8 HAS NO ANSWERS L8 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 18 subset=13 full FULL SUBSET SEARCH INITIATED 15:07:33 FILE 'REGISTRY' FULL SUBSET SCREEN SEARCH COMPLETED - 4077 TO ITERATE

100.0% PROCESSED 4077 ITERATIONS 4069 ANSWERS SEARCH TIME: 00.00.02

L9 4069 SEA SUB=L3 SSS FUL L8

=> s 13 not 19 L10 262 L3 NOT L9

=> fil caplus COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 33.43 353.59 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE 0.00 -0.62

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FILE COVERS 1907 - 15 Nov 2002 VOL 137 ISS 21 FILE LAST UPDATED: 14 Nov 2002 (20021114/ED)

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=> s 110 L11 37 L10

=> d ibib abs hitstr 1-37

### 10007342Page 11 11/15/2002

L11 ANSWER 1 OF 37 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:634313 CAPLUS DOCUMENT NUMBER: 137:185495

137:185495
Preparation of tricyclylsulfonylthiomorpholinecarboxyl ates as matrix metalloproteinase inhibitors
O'Brien, Patrick Michael; Patr, William Chester; Picard, Joseph Armand; Shuler, Kevon Ray; Sliskovic, Drago Robert
Warner-Lambert Company, USA
Eur. Pat. Appl., 31 pp.
CODEN: EPXXDW
Patent INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: Patent English 1

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

EP 1233017 A1 20020821 EP 2002-2815 20020208
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
US 2002169160 A1 20021114 US 2002-71662 20020208
JP 2002308859 A2 20021023 JP 2002-35628 20020213
PRIORITY APPLN. INFO.: US 2001-268737P P 20010215
GI

Title compds. [I, Rl, R2 H, alkyl; R3, R4 - H, halo, alkyl, NO2, alkenyl, alkynyl, (CH2)mCH, (CH2)mCD2RS, (CH2)mCHS, etc.; X = CH, NHOH; V = O, S, SO2, NRS, CH2; R5 - H, alkyl; Z = (CH2)n; m = 0-6; n = 0-2], were prepd. Thus, (S) - 4(dibenzofuran-3-sulfonyl)-2, 2-dimethylthiomorpholine-3-carboxylic acid (prepn. given) was treated with (COC1)2 and cat. DWR in CH2Cl2 to give the crude acid chloride, which was stirred with NH2OH.HCl and NaHCO3 in H2O/THF to give (S) -4 (dibenzofuran-3-sulfonyl)-2, 2-dimethylthiomorpholine-3-carboxylic acid hydroxyamide. The latter inhibited MMF-1Er (full length interstitial collagenase) with ICSO = 0.013 .mu.H. I drug compns. are given. 449962-26-39 449962-27-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study): PREF (Preparation); USES (Uses)
(claimed compd.; prepn. of tricyclylsulfonylthiomorpholinecarboxylates as matrix metalloproteinase inhibitors)
449962-26-3 CAPLUS
4-Thiazolidinecarboxylic acid, 3-(3-dibenzofuranylsulfonyl)-5,5-dimethyl-, (4R) - (9CI) (CA INDEX NAME)

L11 ANSWER 1 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

Absolute stereochemistry.

448962-27-4 CAPLUS 4-Thiazolidinecarboxamide, 3-(3-dibenzofuranylaulfonyl)-N-hydroxy-5,5-dimethyl-, (4R)- (9CI) (CA INDEX NAME)

REFERENCE COUNT

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2002:1462 CAPLUS
136:363244
TITLE: Specific and dual antagonists of .alpha.4.beta.1 and .alpha.4.beta.7 integrins
Lin, Linus S.; Lanza, Thomas; McCauley, Ermenegilda; Van Riper, Gail; Kidambi, Usha; Cao, Jin; Egger, Linda A.; Mumford, Richard A.; Schmidt, John A.; MacCoss, Malcolm Hagmann, William K.

CORPORATE SOURCE: Department of Medicinal Chemistry, Merck Research Laboratories, Rahway, NJ, 07065, USA
Bioorganic 4 Medicinal Chemistry Letters (2002), 12(2), 133-136
COLUMENT TYPE: Linus McLEB; ISSN: 0960-894X
Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB N-(3,5-Dichlorophenylsulfonyl)-(R)-thioprolyl biarylalanine has been identified as a potent and specific antagonist of the .alpha.4.beta.1 integrin. Altering the configuration of thioproline from R to S led to a series of dual antagonists of .alpha.4.beta.1 and .alpha.4.beta.7, and the N-acetyl analog was the most potent dual antagonist. A binding site model for .alpha.4.beta.1 and .alpha.4.beta.7 is proposed to explain the structure-activity relation.

IT 425403-80-49 425403-84-59 425403-85-69
RL: PAC (Pharmacological activity); SPN (Synthetic preparation), THU (Theragoutic use); RFO. (Rological attivity); SPN (Synthetic preparation)

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(Uses)
(specific and dual antagonists of .alpha.4.beta.1 and .alpha.4.beta.7
integrins)
425403-83-4 CAPLUS
[1,1'-Biphenyl]-4-propanoic acid, 2'-methoxy-.alpha.-[[[(4R)-3-(methylsulfonyl)-4-thiazolidinyl]carbonyl]amino]-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

425403-84-5 CAPLUS
[1,1'-Biphenyl]-4-propanoic acid, 2'-methoxy-.alpha.-[[[(4S)-3-(methylsulfonyl)-4-thiazolidinyl]carbonyl]amino]-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

425403-85-6 CAPLUS [[,1"-Biphenyl]-4-propanoic acid, .alpha.-[[[4R]-3-[(3,5-dichlorophenyl]sulfonyl]-4-thiazolidinyl]carbonyl]amino]-2'-methoxy-, (.alpha.5)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

425403-86-7 CAPLUS

(1,1'-Biphenyl]-4-propanoic acid, .alpha.-[[(4\$)-3-[(3,5-dichlorophenyl)sulfonyl]-4-thiazolidinyl]carbonyl]amino]-2'-methoxy-, (.alpha.5)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

# 10007342Page 12 11/15/2002

L11 ANSWER 2 OF 37 CAPLUS COPYRIGHT 2002 ACS

L11 ANSWER 3 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)
Absolute stereochemistry.

220149-12-2 CAPLUS
2(1H)-Isoquinolinecarboxylic acid, 3-{[[4-[(2R)-3-(1,1-dimethylethoxy)-2-[[[(4R)-2,2-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]amino]-3-oxopropyl]phenyl]amino]carbonyl]-3,4-dihydro-, 1,1-dimethylethyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

359014-18-9 CAPLUS JSSUIG-18-9 CAPLUS
L-Phenylalanine, N-[[(4R)-2,2-dimethyl-3-[(4-methylphenyl)sulfonyl]-4thiazolidinyl]carbonyl]-4-[(4-piperidinylcarbonyl)amino]- (9CI) (CA INDEX
NAMF)

Absolute stereochemistry.

Examiner Anderson 703-605-1157

L11 ANSWER 3 OF 37 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:690103 CAPLUS DOCUMENT NUMBER: 135:227251

135:227251
Preparation of N-sulfonylated 4-aminophenylalanine dipeptide derivatives as inhibitors of leukocyte adhesion mediated by VLA-4 Ashwell, Susans, Grant, Francine S.; Konradi, Andrei W.; Kreft, Anthonyl Lombardo, Louis John; Pleiss, Michael A.; Sarantakis, Dimitrios; Semko, Christopher M.; Thorsett, Eugene D.
Athena Neurosciences, Inc., USA; American Home Products Corp. INVENTOR(S):

PATENT ASSIGNEE (S):

Products Corp. U.S., 45 pp. CODEN: USXXAM SOURCE: DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

105 6291453 B1 20010918 US 1998-126091 19980730

PRIORITY APPLIN. INFO: US 1997-112019P P 19970731

OTHER SOURCE(S):

ABD Disclosed are title dispertides RISO2NR2CH83-0-CHR5CO2H [R] =

(un) substituted alkyl, aryl, cycloalkyl, beterocyclyl or heteroaryl; R2 =

H, (un) substituted alkyl, cycloalkyl, cycloalkerl, heterocyclyl, aryl or heteroaryl; R3 = H, any group R1; R1R2N or R2R3N may be (un) substituted heterocyclyl; R5 = (CR2)x-Ar-R5', R5' = NR12C(Z)NR8R8', NR12C(Z)R13); R12 =

H, alkyl, aryl; R8, R8' H, any group R1; R1 and R8' may join together to form a heterocyclic ring; R13 = satd. heterocyclyl; Z = O, S, NR13; x =

1-4; Ar = (un) substituted (hetero) aryl; O = C(XNR7); R7 = H, alkyl; X = O,

S (with provisos)] which bind V1A-4 (also referred to as .alpha.4.beta.1 integrin and CU94G/CD29). Certain of these compds. also inhibit leukocyte adhesion and, in particular, leukocyte adhesion mediated by V1A-4. Such compds. are useful in the treatment of inflammatory diseases in a mammalian patient, e.g., human, such as asthma, Alzheimer's disease, rheumatoid arthritis, tissue transplantation, tumor metastasis and myocardial ischemia. The compds: can also be administered for the treatment of inflammatory brain diseases such as multiple sclerosis. Thus, condensation of N-tosyl-1-prolyl-4-amino-1-phenylalanine Me ester with 3-phenylpropyl intortiocyanate afforded N-tosyl-1-prolyl-4-[3-(3-phenylpropyl); houreido]-1-phenylalanine Me ester.

IT 220149-11-12 220149-12-2P 359014-18-9P

RL BAC (Biological activity or effector, except adverse); BSU (Biological study; PREP (Preparation); USES (Uses)

(prepn. of N-sulfonylated aminophenylalanine dipeptide derivs. as inhibitors of leukocyte adhesion mediated by VIA-4)

RN 220149-11-1 CAPLUS

20149-11-1 CAPLUS

(IH)-1-soquinolinecarboxylic acid, 3-{[4-(2S)-3-(1,1-dimethylethoxy)-2-[([4R)-2,2-dimethyl-3-{(4-methylphenyl)sulfonyl]-4-thiazolidinyl]-3,4-dihydro-, 1,1-dimethylethyl ester, (3S)- (9CI) (CA INDEX NAME)

L11 ANSWER 3 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

359014-20-3

RE: RCT (Reactant); RACT (Reactant or reagent)
[prepn. of N-sulfonylated aminophenylalanine dipeptide derivs. as inhibitors of leukocyte adhesion mediated by VIA-4)
359014-20-3 CAPLUS
D-Phenylalanine, 4-amino-N-[{(4R)-2,2-dimethyl-3-[(4-methylpenyl])sulfonyl]-4-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

### 10007342Page 13 11/15/2002

L11 ANSWER 4 OF 37
ACCESSION NUMBER:
DOCUMENT NUMBER:
114:326767
ITITLE:
INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:
CODEN: Levin, Jeremy I.; Chen, James M.; Cole, Derek C.; Du,
Hila T.; Laakso, Leif M.
American Cyanamid Company, USA
U.S., 109 pp.
CODEN: USXXAM
DOCUMENT TYPE:
PATENT LASSIGNEE(S):
BOCUMENT TYPE:
PATENT LASSIGNEE(S):
CODEN: USXXAM
DOCUMENT TYPE:
PATENT LASSIGNEE(S):
PATENT LASSIGNEE(S):
CODEN: USXXAM
English

LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

PATENT NO. XIND DATE APPLICATION NO. DATE

105 6225311 B1 20010501 US 2000-492691 20000127

PRIORITY APPLIN. INFO:

AMPART 134:326767

AB Amino acid detrys. HONHOCORIRANR3-X-Y-Z-CR4R5C. tplbond.CR6 (X = SO2, P(O)R10, where R10 = alky1, cycloalky1, aryl, heteroaryl; Y = aryl, heteroaryl, with the proviso that X and Z may not be bonded to adjacent atoms of Y: Z = O, NH, CHZ, S; R1 = H, aryl, alkyl, alkenyl, alkynyl, R2 = any group given for R1, aralkyl, heteroaryl, heteroaralkyl, cycloalkyl, cycloheteroalkyl or R1 and R2 may form a ring; R3 = H, alkyl, cycloalkyl, cycloheteroalkyl, aralkyl, heteroaralkyl or R1 and R3 may form a ring; R4, R5 = H, alkyl, CN, C.tplbond.CH; R6 = any group given for R1, heteroaryl, cycloalkyl, cycloalk

methylbutyramide was prepd. and showed IC50 = 7.4 nM for inhibition of TACE.
287405-77-0P 287406-14-8P
RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SFN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (USE)
(prepn. of acetylenic .alpha.-amino acid-based sulfonamide hydroxamic acid TACE inhibitor.
287405-77-0 CAPUS
4-Thisrollabersynmide 3.4/4/2 hydroxynamic acid-tological study acetylenic.

4-Thiazolidinecarboxamide, 3-[[4-(2-butynyloxy)phenyl]sulfonyl]-N-hydroxy-5,5-dimethyl-, (4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 4 OF 37 CAPLUS COPYRIGHT 2002 ACS

REFERENCE COUNT:

THERE ARE 72 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 4 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

287406-14-8 CAPLUS
4-Thiazolidinecarboxamide, 3-{[4-(2-butynyloxy)phenyl}aulfonyl}-N-hydroxy-, (45)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ΙT 287408-72-49

Absolute stereochemistry.

L11 ANSWER 5 OF 37 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2000:842163 CAPLUS DOCUMENT NUMBER: 134:17729 TITLE: Preparation of substitu

INVENTOR(S):

134:17729
Preparation of substituted .beta.-alanine derivatives as cell adhesion inhibitors
Durette, Philippe L., Hagmann, William K.; Kopka, Ihor E.; Naccoss, Malcoles Mills, Sander G.; Mumford, Richard A.; Magriotis, Plato A.
Merck & Co., Inc., USA
PCT Int. Apr. 96 pp.
CODEN: PIXXD2
Parent

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

English 1

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2000071572 A1 20001130 WO 2000-US14017 20000519

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, GG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, NZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NI, FT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, MI, MR, NE, NI, TD, TG

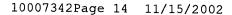
PRIORITY APPIN. INFO::

MARPAT 134:17729

A2 19990524 PATENT NO. KIND DATE APPLICATION NO. DATE

.beta.-Alanine derivs. I [the ring system contg. A-B-Z and R4-R6 is azetidine, oxazolidine, or thiazolidine; X = CO2H, PO3H2, PH(0)OH, SO2H, SO3H or their derivs., esters or amides, 5-tetrazolyl; Y = CO, OCO, NHCO, SO2, etc., R1 = (un)substituted alkyl, alkenyl, alkynyl, cy (Cy = cycloalkyl, heterocyclyl, aryl, heteroaryl), Cy-alkyl, -alkenyl, or -alkynyl, R2 = H, (un)substituted alkyl, alkenyl, alkynyl, aryl, arylalkyl, heteroaryl, heteroarylalkyl; R3 = H, (un)substituted alkyl, Cy, Cy-alkyl, R7-R10 = H, alkyl, alkenyl, alkenyl, alkenyl, aryl, arylalkyl, heteroaryl, heteroarylalkyl; R3 = H, (un)substituted alkyl, Cy, Cy-alkyl, R7-R10 = H, alkyl, alkenyl, alkenyl, atc.) were prepd. as antagonists of VLA-4 and/or .alpha.4.beta.7 and as such are useful in the inhibition or prevention of cell adhesion and cell-adhesion mediated pathologies. Thus, N-(3,5-dichlorobenzenesulfonyl)-2(5)-proyll-3(R)-amino-3-(4-trifluoromethoxyphenyl)propionic acid was prepd. by coupling of N-(3,5-dichlorobenzenesulfonyl)-1-proline with 3(R)-amino-3-(4-trifluoromethoxyphenyl)propionic acid Et ester acetate (synthesis given), followed by sapon.
309977-62-69 309977-63-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)



L11 ANSWER 5 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)
(prepn. of substituted .beta.-alanine derivs. as cell adhesion (prepn. of substi inhibitors) 309977-62-6 CAPLUS

Thiazolidinecarboxylic acid, 3-[(3,5-dichlorophenyl)sulfonyl]-, (4R)-PCI) (CA INDEX NAME)

Absolute stereochemistry.

309977-63-7 CAPLUS 4-Thiazolidinecarboxylic acid, 3-[(3,5-dichlorophenyl)sulfonyl]-, (45)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

309976-98-5P 309976-99-6P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of substituted .beta.-alanine derivs. as cell adhesion inhibitors) 309976-98-5 CAPLUS
Benzenepropanoic acid, .beta.-[[[(4R)-3-[(3,5-dichlorophenyl)sulfonyl]-4-thiazolidinyl]carbonyl]amino]-, (.beta.R)- (9CI) (CA INDEX NAME)

L11 ANSWER 6 OF 37 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:608743 CAPLUS
DOCUMENT NUMBER: 133:207823
TITLE: Heterocyclic benzenesu

133:207823

Heterocyclic benzenesulfonamide compounds useful as bradykini antagonists and their preparation and use Dodey, Pierre: Barth, Martine; Bondoux, Michel Fournier Industrie Et Sante, Fr.
PCT Int. Appl., 118 pp.
CODEN: PIXXD2
Patent
Prench
1 INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE		A	PPLI	CATI	٥.	DATE					
WO 20000504									20000217				
W: AE,	AL, AM, AT	, AU, AZ,	BA.	BB, BG, BR, BY			BY.	CA.	CH.	CN,	CB	CII	
CZ,	DE, DK, DM	EE. ES.	FI.	GB.	GD.	GE.	GH.	GM.	HR.	HU.	T D	TI.	
IN,	IS, JP, KE	KG, KP.	KR.	KZ.	LC.	LK.	LR.	LS.	LT	LII	LV.	MA.	
MD,	MG, MK, MN	, MW, MX,	NO,	NZ,	PL,	PT.	RO.	RU.	SD.	SE.	SG.	SI.	
SK,	SL, TJ, TM	TR, TT,	TZ,	UA,	UG.	US.	UZ.	VN.	YU.	ZA.	2W.	AM.	
AZ,	BY, KG, KZ	, MD, RU,	TJ.	TM									
RW: GH,	GM, KE, LS	MW, SD,	SL,	SZ,	TZ,	UG,	ZW.	AT.	BE.	CH.	CY.	DE.	
DK,	ES, FI, FR	GB, GR,	IE,	IT,	LU,	MC,	NL.	PT.	SE.	BF.	BJ.	CF.	
CG,	CI, CM, GA	GN, GW,	ML.	MR,	NE.	SN.	TD.	TG					
FR 2790260	A1	A1 20000901 FR 1999-2412 199902								226			
FR 2790260	B1	20010504											
BR 20000082	?1 A	20011120		BF	200	00-82	221		2000	217			
EP 1155013	A1	20011121		EF	200	00-90	06414	1 .	20000	217			
R: AT,	BE, CH, DE,	DK, ES,	FR,	GB,	GR,	ΙT,	LI,	LU,	NL,	SE,	MC,	PT,	
1E,	SI, LT, LV,	FI, RO											
JP 200253739	2 T2	20021105		JP	200	0-60	00999	)	20000	217			
US 6479515	B1	20021112		US	200	1-88	9965	,	20010	724			
NO 200100404	B A	20010820		NO	200	1-40	148	- 2	20010	1820			
PRIORITY APPLN. 1	NFO.:												
OTHER SOURCE (E)		D	W	TO 20	00-F	'R396	5	w :	20000	217			
OTHER SOURCE(S):	MAI	PAT 133:2	20/82	3									

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

The invention concerns title compds. I [Hetl = 5-membered N heterocycle, particularly imidazole, pyrazole, or triazole, bound at N; Het2 = 4- to 6-membered N heterocycle selected from morpholine and certain (un) substituted azetidines, pyrcolines, pyrcolidines, piperidines, and thiazolidines, all bound at N] and their addn. salts. The invention also concerns a method for prepg. 1, and the use of I in therapy, particularly for treating bain, related pathologies. Uses of I for treating pain, inflammation, and severe traumatic shock are specifically claimed. Over 200 examples were prepd. For instance, 8-hydroxy-4-(H-imidazol-y1)-2-methylquinoline was etherified with N-[[3-(bromomethy1)-2,4-dichlorophenyl]sulfonyl]-1-proline Me setter using NaH in DMF (681), followed by sapon. of the Me ester (891), amidation with N-(3-minopropy)1-4-cyanobenzamide trifluoracetate (811), conversion of the cyano group to amidino in 3 steps (981, 951, 661), and salification in MeOH (751), to give title compd. II as the bismethanesulfonate. (III). In

Examiner Anderson 703-605-1157

L11 ANSWER 5 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

309976-99-6 CAPLUS Benzenepropanoic acid, .beta.-[[[(4S)-3-[(3,5-dichlorophenyl)sulfonyl]-4-thiazolidinyl]carbonyl]amino]-, (.beta.R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 6 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued) a test for inhibition of [3H]-bradykinin binding to B2 receptors expressed in CHO cells, III had a Ki of 0.24 nM. III also inhibited bradykinin-induced contraction of isolated human umbilical vein, with a pA2 of 10.

290344-40-0P, 3-[[2,4-bichloro-3-[[4-(IH-imidazol-1-ył)-2-methyl-8-quinolinyl]owy] methyl] phenyl] sulfonyl]-N-methyl-4-(R)-thiazolidinecarboxamide
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclarsificed); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(drug candidate; preph. of heterocyclic benzenesulfonamide derivs. as bradykinin antagonists)
290344-40-0 CAPLUS
4-Thiazolidinecarboxamide, 3-[[2,4-dichloro-3-[[4-(IH-imidazol-1-yl)-2-methyl-3-quinolinyl]oxy]methyl]phenyl]sulfonyl]-N-methyl-, (4R)- (9CI)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

 $\begin{tabular}{ll} \bf 290344-41-1P, & $3-\{\{2,4-Dichloro-3-[\{4-\{1R-imidazol-1-y1\}-2-methyl-8-quinolinyl]oxy]methyl]phenyl]sulfonyl]-N-methyl-4-(R)- \\ \end{tabular}$ 

# 10007342Page 15 11/15/2002

L11 ANSWER 6 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued) thiazolidinecarboxamide methanesulfonate RL: BAC (Biological activity or effector, except adverse); BSU (Biological study), unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREF (Preparation); USES (Uses) (drug candidate; prepn. of heterocyclic benzenesulfonamide derivs. as bradykinia antagonists)
RN 290344-41-1 CAPLUS
CN 4-Thiazolidinecarboxamide, 3-[[2,4-dichloro-3-[[[4-(H-imidazol-1-y1)-2-methyl-8-quinoliny]]oxylmethyl]phenyl]sulfonyl]-N-methyl-, (4R)-, monomethanesulfonate (9CI) (CA INDEX NAME)

CRN 290344-40-0 CMF C25 H23 C12 N5 O4 S2

Absolute stereochemistry.

PAGE 2-A

L11 ANSWER 7 OF 37 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:535102 CAPLUS
DOCUMENT NUMBER: 133:150098
TITLE: Preparation of acetyler

133:150908
Preparation of acetylenic .alpha.-amino acid-based sulfonamide hydroxamic acid TACE inhibitors Levin, Jeremy Ian: Chen, James Ming; Cole, Derek Cecil American Cyanamid Company, USA
PCT Int. Appl., 293 pp.
CODEN: PIXKO2 INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: English 1

PATENT 1	NO.	KIND	DATE			A	PPLI	CATI	ON N	٥.	DATE							
¥O 20000	044709	A2	0803							20000127								
WO 20000	144709	A3	2000	1221														
	AE, AL,				BA.	BB.	BG.	BR.	RY.	CA	CH	CN	CD	CII				
	CZ, DE,	DK, D	M. EE.	ES.	FI.	GB.	GD.	GE.	GH.	GM,	HD.	En:	th.	ττ,				
	IN, IS,	JP. K	E. KG.	KP.	KR.	KZ.	LC.	LK.	LR.	1.5	LT.	111	tv,	HZ,				
	MD, MG,	MK. M	N. MW.	MX.	NO.	NZ.	PI.	PT.	10	DII,	en,	cr.	EC.	CT.				
	SK, SL,	TJ. T	M. TR.	TT.	т2	112	IIG.	112	1/01	VIII	25,	36,	30,	31,				
	BY, KG,	K2. M	D BII	TI	TH.	on,	ου,	UL,	A 14 ,	10,	LA,	∠w,	AM,	AZ,				
RW:	GH, GM,					67	***											
	DV PC	EI E	D, 614,	30,	36,	34,	12,	UG,	Zw,	AT,	BE,	CH,	CY,	DE,				
	DK, ES,	C1, F	R, GB,	GR,	ıE,	1Т,	LU,	MC,	NL,	PT,	SE,	BF,	ΒJ,	CF,				
PD 11447	CG, CI,	Cri, G	A, GN,	GW,	м.,	MR,	ΝE,	SN,	TD,	TG								
EP 11443	68	A2	E	200	00-91	05751	3	2000	00127									
R:	AT, BE,	CH, D	E, DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC.	PT.				
	IE, SI,	LT, L	V, FI,	RO									-					
BR 20000	07752	A	2001	1204		BF	200	00-7	752		20000	127						
JP 20025	35382	Т2	2002	1022		JE	200	00-59	1596	5	2000	1127						
NO 20010	03674	A	20010	0924		NC	200	11 - 36	574		20010	1726						
PRIORITY APPL	N. INFO.	. :			ι	JS 19	199-2	23829	55	A	19990	1127						
						10 20	000-1	15198	11	ü	20000	1127						
OTHER SOURCE (	S):	M.	ARPAT 1	133:1	5090	DR			•	-	20000	, 42 1						
AB Amino ac	id deriv	ra. HOI	THCOCR1	מעכמו	3-V-	V-7-	CDAT		11		-n							
					- n-		~441		PATOC	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	uro I	Λ =	DUZ.					

Amino acid derivs, HOMHOCKIRZNR3-X-Y-2-CR4R5C.tplbond.CR6 [X = SO2, P(O)R10, where R10 = alkyl, cycloalkyl, aryl, hetercaryl: Y = aryl, hetercaryl, with the proviso that X and Z may not be bonded to adjacent atoms of Y; Z = 0, NH, CH2, S; RI = H, aryl, alkyl, alkenyl, alkynyl; R2 = any group given for R1, aralkyl, hetercaryl, heteroaralkyl, cycloalkyl, cyclohetercalkyl or R1 and R2 may form a ring; R3 = H, alkyl, cycloalkyl, cycloheteroalkyl, aralkyl, heteroaralkyl or R1 and R3 may form a ring; R4, R5 = H, alkyl, CW, C.tplbond.CH; R6 = any group given for R1, heteroaryl, cycloheteroalkyl, aralkyl, heteroaralkyl or pharmaceutically acceptable salts were prepd. as inhibitors of TNF-alpha. converting enzyme (TACE). Thus, 2-[(4-but-2-ynyloxyberaenesulfonyl)methylaminol-N-hydroxy-3-methylbutyramide was prepd. and showed ICSO = 7.4 nM for inhibition of TACE.

TACE. 287405-77-0P 287406-14-8P

287405-77-09 287406-14-89

RE: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SFN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Use) (prepn. of acetylenic .alpha.-amino acid-based sulfonamide hydroxamic acid TACE inhibitors)

287405-77-0 CAPLUS

4-Thiazolidinecarboxamide, 3-[[4-(2-butynyloxy)phenyl]sulfonyl]-N-hydroxy-5,5-dimethyl-, (4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Examiner Anderson 703-605-1157

L11 ANSWER 6 OF 37 CAPLUS COPYRIGHT 2002 ACS

CM 2

CRN 75-75-2 CMF C H4 O3 S

29U345-36-, CAPUS
4-Thiazolidinecarboxylic acid, 3-[[2,4-dichloro-3-[[[4-(1H-imidazol-1-yl)-2-methyl-8-quinolinyl]oxy]methyl]phenyl]sulfonyl]-, {4R}- (9CI) (CA INDEX

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 7 OF 37 CAPLUS COPYRIGHT 2002 ACS

287406-14-8 CAPLUS
4-Thiazolidinecarboxamide, 3-[[4-(2-butynyloxy)phenyl]sulfonyl]-N-hydroxy-, (45)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

287408-72-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of acetylenic alpha.-amino acid-based sulfonamide hydroxamic acid TACE inhibitors)
287408-72-4 CAPIUS
4-Thiazolidinecarboxylic acid, 3-[[4-(2-butynyloxy)phenyl]sulfonyl]-5,5-dimethyl-, (4S)- (9CI) (CA INDEX NAME)

### 10007342Page 16 11/15/2002

L11 ANSWER 7 OF 37 CAPLUS COPYRIGHT 2002 ACS

L11 ANSWER 8 OF 37 CAPIUS COPYRIGHT 2002 ACS (Continued) enhancing memory performance in an animal. I bind to immunophilin FKBP12 and preferably do not have immunosuppressive activity. Affinity for FKBP12 is measured as inhibition of prolyl peptidyl cia-trans isomerase (rotamase). Thus, GPI 1046 (10 mg/kg s.c.) protected retinal ganglion cells and optic nerve axons and myelin against degeneration following retinal ischemia in rats, and protected against retinal ganglion cell death after optic nerve transection. Me 1,3-oxazolidine-4-carboxylate was condensed with Me oxalyl chloride and the product reacted with 1,1-dimethylpropylmagnesium chloride and sapon. to produce 3-(3,3-dimethyl-2-oxopentancyl-1,3-oxazolidine-4-carboxylic acid, I [X = Z = CHZ, Y = 0, A = CH3CH2CMe2C(0)C(0), D = bond, R2 = CO2H, n = 1].

IT 251951-77-6F 251951-78-7P R1: BAC (Biological activity or effector, except adverse); BSU (Biological study); PREP (Preparation); VSES (Uses) (carboxylic acids and isosteres of heterocyclic ring compds. having multiple heteroatoms for vision and memory disorders)

RN 251951-77-6 CAPIUS

A-Thiazolidinecarboxamide, N-methoxy-3-[(phenylmethyl)sulfonyl]-, (4R)-4broulte stargorheater)

Absolute stereochemistry.

251951-78-7 CAPLUS 4-Thiazolidinecarboxamide, 3-[(4-methylphenyl)sulfonyl]-N-propoxy-, (4R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

132:175848
Carboxylic acids and isosteres of heterocyclic ring compounds having multiple heteroatoms for vision and memory disorders memory disorders
Ross, Douglas T.; Sauer, Hansjorg; Hamilton, Gregory
S.; Steiner, Joseph P.
Guilford Pharmaceuticals Inc., USA
PCT Int. Appl., 91 pp.
CODEN: PIXXXO2 INVENTOR (S): PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: English 1 PATENT NO. KIND DATE APPLICATION NO. DATE A2 20000224 A3 2000101 72 20020723 JP 2000-564609 19990812 US 1998-134476 A 19980814 WO 1999-US18238 W 19990812 MARPAT 132:175848 OTHER SOURCE(S):

The title compds. [I, X, Y, Z = C, O, S, N; A = RlC(0)C(0), RlC(0)C(S), RlSC(2), Rl(E)NC(0); Rl, E = H, Cl-9 alkyl, C2-9 alkenyl, aryl, heteroaryl, carbocyclyl, heterocyclyl; D = bond, (substituted) Cl-10 alkylene, CH:CH: RZ = COZH, carboxylic acid isoster; n = l-3] are prepd for treating vision disorders, improving vision, treating memory impairment, or

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L11 ANSWER 9 OF 37 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:68444 CAPLUS
DOCUMENT NUMBER: 132:108294
TITLE: Preparation of amino ac
                                                                                                                                           132:108294
Preparation of amino acid derivatives as N-type calcium channel inhibitors
Seko, Takuyar Kato, Masashi
Ono Pharmaceutical Co., Ltd., Japan
PCT Int. Appl., 179 pp.
CODEN: PIXXD2
        INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:
        DOCUMENT TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                                                                                                              Patent
                                                                                                                                          Japanese
1
WO 2000004005 A1 20000127 WO 1999-JP3776 19990713
W: JP, KR, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
EP 1097929 A1 20010509 EP 1999-929813 19990713
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI
PRIORITY APPLN. INFO::

JP 1998-213452 A 19980714
                                                                                                                           KIND DATE
                                                                                                                                                                                                                                            APPLICATION NO. DATE
R: AI, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NI, SE, MC, PT, IE, FI

PRIORITY APPLM. INFO.: JP 1998-213452 A 19980714

OTHER SOURCE(S): MARPAT 132:108294

AB The title compds. RIAWR2CH(DER3)COJM4 [RI = Ph, cycloalkyl, etc., A = CO, etc., R2 = H, (phenyl-substituted) alkyl, D = alkylene, etc., E = CCO, etc., R3 = haterocyclic ring, etc., J = O, etc., R4 = alkyl, heterocyclic ring, etc.] are prepd. The title compds. are useful as preventives and/or remedies for brain infarction, transient cerebral ischemic attack, postoperative cerebrospinal failure, spinal vascular failure, stress hypertension, neurosis, epilepsy, asthma, frequent urination, etc. or remedies for pain. Formulations are given. In an in vitro test (for N-type calcium channel inhibiting activity) using cells, [2R)-N-(1-benzylpiperidin-4-yl)-3-cyclohexylmethylthio-2-(4R)-3-(2-methoxyethoxycarbonyl) this accidin-4-ylcarbonylamino)propanamide hydrochloride at 3 mm.M gave 81% inhibition of calcium inflow.

17 255735-08-1p 255735-64-9p 255735-66-0p
                        235733-66-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); TRU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of amino acid derivs. as N-type calcium channel inhibitors) 25735-08-1 CAPJUS 4-Thiazolidinecarboxamide, N-[(IR)-1-[[(cyclohexylmethyl)thio]methyl]-2-oxo-2-[[i-(phenylmethyl)-4-piperidinyl]amino]ethyl]-3-(phenylsulfonyl)-, (4R)- (9CI) (CA INDEX NAME)
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### 10007342Page 17 11/15/2002

### L11 ANSWER 9 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

255735-64-9 CAPLUS
4-Thiazolidinecarboxamide, N-[(1R)-1-[[(cyclohexylmethyl)thio]methyl]-2-oxo-2-[[1-(phenylmethyl)-4-piperidinyl]amino]ethyl]-3-[(1-methylethyl)sulfonyl]-, monohydrochloride, (4R)- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

• HC1

255735-65-0 CAPLUS 4-Thiazolidinecarboxamide, N-[{1R}]-1-[{(cyclohexylmethyl}thio]methyl}-2-oxo-2-{[1-(phenylmethyl})-4-piperidinyl]amino]ethyl]-3-(cyclopentylaulfonyl)-, monohydrochloride, (4R)- (9CI) (CA INDEX NAME)

L11 ANSWER 10 OF 37 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:819360 CAPLUS
DOCUMENT NUMBER: 132:64524
TITLE: Preparation of N-thiazol

INVENTOR(S):

132:64524
Preparation of N-thiazolidinylcarbonylphenylalanine derivatives and analogs as inhibitors of .alpha.4.beta.1 mediated cell adhesion
Blinn, James R.; Chrusciel, Robert A.; Fisher, Jed F.; Tanis, Steven P.; Thomas, Edward William; Lobl, Thomas J.; Teegarden, Bradley R.
Pharmacia and Upjohn Company, USA; Tanabe Seiyaku Co., Ltd.

PATENT ASSIGNEE(S):

PARTMACIA AND UPJONN CO Ltd. PCT Int. Appl., 308 pp. CODEN: PIXXD2 Patent English 1 SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

WO 9967230 Al 19991229 WO 1999-US14233 19990623

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GK, HR, HU, ID, IL, IN, IS, JP, KB, KG, KP, KR, KZ, LC, LK, KR, LS, LT, LU, LV, MD, MG, MK, MN, MO, NC, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, VIV, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, SD, SE, SG, SI, SK, SL, TJ, TM, RV, GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GM, GW, ML, MR, NE, SN, TD, TG
AU 9947116 Al 20000110 AU 1999-47116 19990623

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FII

JP 2002518491 T2 20020625 JP 2000-555884 19990623

WO 1999-1814212 P 19980623

OTHER SOURCEACH. PATENT NO. KIND DATE 12 20020625 JP 2000-55584 19990623 US 1998-90421P P 19980623 WO 1999-US14233 W 19990623 MARPAT 132:64524 OTHER SOURCE(S):

L11 ANSWER 9 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

255735-66-1 CAPLUS
4-Thiazolidinecarboxamide, N-[(1R)-1-[[(cyclohexylmethyl)thio]methyl]-2cxo-2-[[1-(phenylmethyl)-4-piperidinyl]amino]ethyl]-3-[(2methylpropyl)sulfonyl, monohydrochloride, (4R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

• HCl

REFERENCE COUNT:

THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 10 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

Title compds. (I) [wherein m = 1 or 2; n and p = independently 0 or 1; q = 1-3; R1 = independently H or alkyl for 1-4 occurrences; R2 = H, pyridyl, alkyl, or carboxy(alkyl); or R1 and R2 may be attached to the same C and form a 5-8 membered carbocyclic or azacyclic ring; R3 = H, Ph, (aryl) alkyl, alkenyl, carboxy(alkyl), acyalakyl, alkenyl, alkylaryloxy, or pyridylmethoxy; R5 = (un)substituted Ph or pyridyl; w = C1-6 alkyl; X = S, O, or CH2; Y = C(O), C(O), SO2, or (un)substituted C(O)MH], pharmaceutically acceptable salts and stereoisomers thereof, were preped, as inhibitors of .alpha.4 beta.1 mediated adherion to either the vascular cell adherion mol. (VCAM-1) or the C5-1 domain of fibronectin and are useful in the treatment of inflammatory diseases. Approx. 290 invention compds. and their intermediates were prepd. via traditional or solid phase synthetic methods. For instance, II was synthesized in a 6-step sequence involving (1) cyclization of D-cysteine HCl with HCHO to form (S)-3-thiazolidinecarboxylic acid, (2) N-protection with di-t-bu dicarbonate, (3) amidation with 4-[(2,6-dichlorobenzoyl)amino]-L-phenylalanine Me ester, (4) N-deprotection with HCl, (5) N-memylation, and (6) deesterification with ac, NaOH, followed by work up, chromatog,, and lyophilization. In vitro cell adhesion inhibitory and/or modulatory activities were reported for approx. 270 invention compds tested in users a companylation assays. Nine of the 21 compds. assayed showed > 000 inhibition of VLA-4 integrin-dependent eosinophil infiltration against acute inflammation and are expected to be useful in the treatment of asthma and other VLA-4 integrin-dependent eosinophil infiltration against acute inflammation and accitated diseases.

253135-18-09 233132-38-09 253132-38-09 PKI BBC (Relac

# 10007342Page 18 11/15/2002

L11 ANSWER 10 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)
and analogs as inhibitors of .alpha.4.beta.1 mediated cell adhesion)
RN 253152-18-0 CAPLUS
CN L-Phenylalanine, 4-([2,6-dichlorobenzoyl)amino]-N-[[(45)-3-(methylsulfonyl)-4-thiazolidinyl)carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

253152-58-8 CAPLUS L-Phenylalanine, 4-[(2,6-dichlorobenzoyl)amino]-N-[[(4S)-3-(ethylaulfonyl)-4-thiazolidinyl]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

253152-60-2 CAPLUS
L-Phenylalanine, 4-[(2,6-dichlorobenzoyl)amino]-N-[[(45)-3-[[5-(trifluoromethyl)-2-pyridinyl]sulfonyl]-4-thiazolidinyl]carbonyl]-, methylester (9CI) (CA INDEX NAME)

L11 ANSWER 10 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

253152-66-8 CAPLUS L-Tyrosine, 0-{(2,6-dichlorophenyl)methyl]-N-{[(4S)-3-(methylsulfonyl)-4-thiazolidinyl]carbonyl}-, methyl ester (9CI) (CA INUEX NAME)

Absolute stereochemistry.

253152-19-1P 253152-59-9P 253152-61-3P
253152-63-5P 253152-65-7P 253152-67-9P
253153-72-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified), SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (target compd.; prepn. of N-thiazolidinylcarbonylphenylalanine derivs. and analogs as inhibitors of .alpha.4.beta.1 mediated cell adhesion)
253152-19-1 CAPLUS
L-Phenylalanine, 4-[(2,6-dichlorobenzoyl)amino]-N-[((45)-3-(methylsulfonyl)-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L11 ANSWER 10 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

253152-62-4 CAPLUS
L-Phenylalanine, 4-[(2,6-dichlorobenzoyl)amino]-N-[[(4S)-3-(phenylaulfonyl)-4-thiazolidinyl]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

253152-64-6 CAPLUS L-Phenylalanine, 4-[(2,6-dichlorobenzoyl)amino]-N-[[(4S)-3-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-4-thiazolidinyl]carbonyl]-, methyl ester (9Cl) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 10 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

253152-59-9 CAPLUS
L-Phenylalanine, 4-[(2,6-dichlorobenzoyl)amino]-N-[[(4S)-3-(ethylsulfonyl)-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

253152-61-3 CAPLUS L-Phenylalanine, 4-((2,6-dichlorobenzoyl)amino]-N-[[(45)-3-[[5-(trifluoromethyl)-2-pyridinyl]aulfonyl]-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

253152-63-5 CAPLUS L-Phenylalanine, 4-[(2,6-dichlorobenzoyl)amino]-N-[[(4S)-3-(phenylsulfonyl)-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

# 10007342Page 19 11/15/2002

### L11 ANSWER 10 OF 37 CAPLUS COPYRIGHT 2002 ACS

253152-65-7 CAPLUS L-Phenylalanine, 4-[(2,6-dichlorobenzoyl)amino]-N-[[(45)-3-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

253152-67-9 CAPLUS L-Tyrosine, O-[(2,6-dichlorophenyl)methyl]-N-[((4S)-3-(methylaulfonyl)-4-thiazolidinyl]carbonyl)- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

L11 ANSWER 11 OF 37
ACCESSION NUMBER:
1999:811266 CAPLUS
DOCUMENT NUMBER:
11711E:
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PATENT NO. KIND DATE APPLICATION NO. DATE

WO 99565932 A1 19991223 WO 1999-US13638 19990618

V: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, IF, LU, LY, MD, MG, MK, MN, MW, MX, NO, NZ, FL, FT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GW, MI, MR, NE, SN, TD, TG

AU 9945729 A1 20000105 AU 1999-45729 19990618

RRITY APPLN. INFO: WARPAT 132:50253 PRIORITY APPLN. INFO.: OTHER SOURCE(S):

Tetrapeptides or analogs or peptidomimetics thereof, e.g., I (X = COR, SOZR, CONR2; Y = O, S, NR, (H)2, (R)2; Z = R, OR, SR, NR2; R = H, Me, lower alkyl, lower heteroalkyl, aryl, heteroaryl, aralkyl, heteroaralkyl; R1 = H, Me, lower alkyl, alkyl, aryl, heteroaryl, side chain of any naturally occurring .alpha.-amino acids; R and R1 taken together, when attached to adjacent N and C atoms, resp., may represent a ring with a total of 5-7 backbone atoms inclusive; said ring may contain two addnl. heteroatoms selected from O, S, N, Se and P; said ring may be unsubstituted or further substituted with one or more R, etc.), were prepd. as ligands for mammalian opioid receptors. For example, N-[[(2,5-difluorophenyl)amino]carbonyl]-Pro-Phe-HPA-HHZ (II) (HPA = L-homophenylalanine) was synthesized from Rink resin-bound Pmc-Pro-Phe-HPA and 2,5-difluorophenyl isocyanate; II demonstrated IC50 < 1 mu.M and < 10 .mu.M in .mu.- and .kappa.-opioid receptor assays, resp. The title compds. comprise full agonists, partial agonists, and antagonists of mammalian opioid receptors.

282766-34-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified), SPN (Synthetic preparation), THU (Therapeutic use); CAMINE A Decider Anderson TO 3-605-1157

Examiner Anderson 703-605-1157

L11 ANSWER 10 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

253153-72-9 CAPLUS
4-Thiazolidinecarboxamide, N-[(1S)-2-amino-1-[[4-[(2,6-dichlorophenyl)methoxy]phenyl]methyl]-2-oxoethyl]-3-(methylsulfonyl)-,
(4S)- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

REFERENCE COUNT: THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 11 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)
BIOL (Biological study): PREP (Preparation): USES (Uses)
(prepn. of tetrapeptides and their analogs that selectively bind
mammalian opioid receptors)
252766-54-4 CAPLUS
4-Thiazolidinecarboxamide, N-[(1S)-2-[[(1S)-1-(aminocarbonyl)-3-phenylpropyl]amino]-2-oxo-1-(phenylpropyl]amino]-2-oxo-1-(phenylpropyl)amino]-3-(3,4dichlorophenyl)sulfonyl]-, (4R)- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

REFERENCE COUNT: THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

### 10007342Page 20 11/15/2002

L11 ANSWER 12 OF 37 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999: 784085 CAPLUS
DOCUMENT NUMBER: 12:18814
Aza-heterocyclic compounds used to treat neurological disorders and hair loss
INVENTOR(S): Hamilton, Gregory S.; Norman, Mark H.; Wu, Yong-Qian; Li, Jia-He; Steiner, Joseph P.
FATENT ASSIGNEE(S): Guilford Pharmaceuticals Inc., USA; Amgen, Inc.
SOURCE: PCT Int. Appl., 106 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

OTHER SOURCE(S): MARPAT 132:18814

The invention is directed to carboxylic acids and isosteres of heterocyclic ring compds. I  $\{X, Y, Z = C, O, S, N \}$  (provided that not all X, Y, Z are C, D, n = 1-3; A = R1C(O)C(O), R1C(O)C(S), R1SO2, (E)(R1)NC(O); R1, E = H, C1-9 (un)branched alkyl or alkenyl, aryl, etc.; D = C1-10 (un)branched alkyl, ethylene; R2 = carboxylic acid or carboxylic

L11 ANSWER 12 OF 37 CAPLUS COPYRIGHT 2002 ACS

251953-46-5 CAPLUS 2-Thiazolidinecarboxam (9CI) (CA INDEX NAME) xamide, N-ethoxy-3-[(1-phenylethyl)sulfonyl]-, (25)-

Absolute stereochemistry.

251953-47-6 CAPLUS 2-Thiazolidinecarboxamide, 3-[(4-methylphenyl)sulfonyl]-N-ргороху-, (25)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 12 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued) acid isostere) which have multiple heterostoms within the heterocyclic ring, derivs. contp. N-linked diketos, sulfonamides, ureas and carbamates attached thereto, their prepn. and use for treating neurol. disorders including phys. damaged nerves and neurodegenerative diseases, as well as for treating alopecia and promoting hair growth.

IT 251951-77-6 251951-78-7 251953-45-4
251953-46-5 Eliss53-47-6 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study); USES (Uses)
(heterocyclic compds. for treatment of neurol. disorder or hair loss)

(beterocyclic compds. for treatment of neurol. disorder or hair loss) 251951-77-6 CAPLUS 4-Thiazolidinecarboxamide, N-methoxy-3-[(phenylmethyl)sulfonyl]-, (4R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

251951-78-7 CAPLUS 4-Thiazolidinecerboxamide, 3-[(4-methylphenyl)sulfonyl]-N-propoxy-, (4R)-(9C1) (CA INDEX NAME)

Absolute stereochemistry.

251953-45-4 CAPLUS
2-Thiazolidinecarboxamide, N-methoxy-3-[(phenylmethyl)sulfonyl]-, (25)-(9C1) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 13 OF 37 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:663041 CAPLUS DOCUMENT NUMBER: 132:64251 132:64251 Design, Synthesis, and E

AUTHOR(S):

132:64251
Design, Synthesis, and Biological Evaluation of Potent
Thiazine- and Thiazepine-Based Matrix
Metalloproteinase Inhibitors
Almstead, Neil G.; Bradley, Rimma S.; Pikul,
Stanislaw; De, Biswanath; Natchus, Michael G.; Taiwo,
Yetunde O.; Gu, Fei; Williams, Lisa E.; Hynd, Barbara
A.; Janusz, Michael J.; Dunaway, C. Michelle; Mieling,
Glen E. Yetunde O.; Gu, Fe; Williams, Lisa E.; Hynd, B. A.; Janusz, Michael J.; Dunaway, C. Michelle; M. Glen E. Procter and Gamble Pharmaceuticals, Health Care Research Center, Mason, OH, 45040, USA Journal of Medicinal Chemistry (1999), 42(22), 4547-4552

CORPORATE SOURCE:

SOURCE:

434/-4502 CODEN: JMCMAR; ISSN: 0022-2623 American Chemical Society Journal English PUBLISHER:

DOCUMENT TYPE: LANGUAGE:

The synthesis and enzyme inhibition data for a series of thiszine—and thiszepine—based matrix metalloproteinase (MMP) inhibitors are described. The thiszine—and thiszepine—based inhibitors were discovered by optimization of hetererocyclic sulfonamide—based inhibitors. The most potent series of inhibitors was obtained by medification of the amino acid D-penicillamine. This amino acid provides a genedi—Me group on the thiszine or thiszepine ring which has a dramatic effect on the in vitro potency of this series. In particular, the sulfide I [n = 0] and the sulfone I [n = 2] were potent, broad-spectrum inhibitors of the MMPs with ICSO's against MMP-1 of 0.8 and 1.9 nM, resp. The binding mode of this novel thiszepine—based series of MMP inhibitors was established based on X-ray crystallog, of the complex of stromelysin and I [n = 0].
253195-08-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. of thiszepine—and thiszinehydroxamic acids as metalloproteinase inhibitors)
25195-08-3 CAPLUS
4-Thiszolidinecarboxamide, N-hydroxy-3-[(4-methoxyphenyl)sulfonyl]- (9CI) (CA INDEX NAME)

# 10007342Page 21 11/15/2002

#### L11 ANSWER 13 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

253195-11-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of thiszepine- and thiszinehydroxamic acids as
metalloproteinase inhibitors)
253195-11-8 CAPLUS
4-Thiszolidinecarboxylic acid, 3-[(4-methoxyphenyl)sulfonyl]- (9CI) (CA

INDEX NAME)

REFERENCE COUNT:

THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 15 OF 37 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:187470 CAPLUS
110:311751
Synthesis of tricyclic tetrahydro 1,2-benzothiazinones
via Friedel-Craft anionic equivalents
Familoni, O. B.
Department of Chemistry, University of Lagos, Lagos,
Nigeria
Journal of Pharmaceutical Research and Development
(1998), 3(1), 21-29
PUBLISHER: National Institute for Pharmaceutical Research and
DOCUMENT TYPE:
LANGUAGE: Egglish

DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

English CASREACT 130:311751

N-Benzenesulfonyl pyrrolidine-2-carboxamide, N-benzenesulfonyl piperidine-2-carboxamide and its substituted analogs were made to undergo Friedel-Craft Anionic Equiv. (FCAE) in lithium diisopropyl amide (LDA). Unsubstituted analogs gave the tricyclic benzothiazinones, e.g., I, in fair yields, while substituted analogs could not give the target commgds. This type of reaction is not possible with the classical Friedel-Crafts reaction.
223562-07-0P

Z23562-07-09 RACT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (intermediate in prepn. of tricyclic benzothiazinones by cyclization of sulfonamides as Friedel Crafts anionic equivs.) 223562-07-0 CAPIUS 4-Thiazolidincarboxylic acid, 3-[(4-methylphenyl)sulfonyl]- (9CI) (CA INDEX NAME)

Examiner Anderson 703-605-1157

L11 ANSWER 14 OF 37 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:521346 CAPLUS
DOCUMENT NUMBER: 131:286208
TITLE: Generation of diphenyldiazomethane by oxidation of benzophenone hydrazone with Magtrieve
AUTHOR(S): Ko, Kwang-Youni Kim, Ji-Yeon
CORPORATE SOURCE: Bulletin of the Korean Chemistry, Ajou University, Suwon, 442-749, S. Korea
SOURCE: Bulletin of the Korean Chemical Society (1999), 20(7), 771-772
CODEN: BKCSDE, ISSN: 0253-2964
ENGENENT TYPE: Korean Chemical Society
JOURNAL LANGUAGE: English
CTHER SOURCE(S): CASREACT 131:286208
AB Teatment of benzophenone hydrazone with Magtrieve in CH2C12 gave diphenyldiazomethane immediately. After the reaction was complete carboxylic acids including N-protected amino acids (RCOZH) to give RCOZCHPh2.

IT 266177-41-3

RCO2CHPh2.
246177-41-3
RL: RCT (Reactant): RACT (Reactant or reagent)
(formation by oxidn. of benzophenone hydrazone with Magtrieve in 1-pot
conversion of carboxylic acids to esters)
246177-41-3 CAPLUS
4-Thiazolidinecarboxylic acid, 3-[(4-methylphenyl)sulfonyl]-, (4R)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 15 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)
RENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

### 10007342Page 22 11/15/2002

L11 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:113712 CAPLUS COPYRIGHT 2002 ACS 130:168662 TITLE: Preparation of William Propagation of Wi 130:168662
Preparation of N-sulfonylproline dipeptide derivatives and analogs as inhibitors of leukocyte adhesion mediated by VLA-4
Thorsett, Eugene D.; Semko, Christopher M.; Pleiss, Michael A.; Kreft, Anthony; Konradi, Andrei W.; Grant, Francine S.; Baudy, Reinhardt Bernhard; Sarantakis, Dimitrios INVENTOR(S):

PATENT ASSIGNEE(S):

Dimitrios
Athena Neurosciences, Inc., USA; American Home
Products Corporation
PCT Int. Appl., 294 pp.
CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: English

PATENT NO. KIND DATE APPLICATION NO. DATE

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, 1E, SI, LT, LV, PI, DO

BR 9811594 A 20000905 BR 1998-11594 19980731
JP 2001512139 T2 20010821 JP 2000-505192 19980731
NO 2000000452 A 20000027 NO 2000-452 200000128
PRIORITY AFPLM. INFO: US 1997-904423 A2 19970731

OTHER SOURCE(S): MARPAT 130:168662
AB Disclosed are title compds. RISOZNR2CHR3QCHR5COR6 [R1 = (un) substituted alkyl, (un) substituted aryl, (un) substituted cycloalkyl, (un) substituted heterocyclyl: R2 = H, any group R1: R1R2 may form (un) substituted heterocyclyl: R2 = H, any group R1: R1R2 may form (un) substituted alkyl, alkowy, aryloxy, aryl, aryloxyaryl, cOZH, carboxyalkyl, carboxyaryl, c

L11 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220302-86-3 CAPLUS L-Phenylalanine, N-[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-4-[(3-pyridinylcarbonyl)amino]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220302-96-5 CAPLUS L-Phenylalanine, 4-(acetylamino)-N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220337-23-5 CAPLUS L-Phenylalanine, N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-4-[(4-pyridinylcarbonyl)anino]-, ethyl ester (9CI)

Examiner Anderson 703-605-1157

ANSWER 16 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued) these compds. also inhibit leukocyte adhesion and, in particular, leukocyte adhesion mediated by VLA-4. Such compds. are useful in the treatment of inflammatory diseases in a mammalian patient, e.g., human, wherein the disease may be, for example, asthma, Altheimer's disease, atherosclerosis, AIDS dementia, diabetes, inflammatory beat disease, theumatoid arthritis, tissue transplantation, tumor metastasis and myocardial ischemia. The compds. can also be administered for the treatment of inflammatory brain diseases such as multiple sclerosis. Thus, BOP-mediated peptide coupling of Ts-Pro-OR (Ts - tosyl) with H-Tyr-ONE gave 75% of the corresponding ester, which underwent sapon, in quant, yield to give desired dipeptide Ts-Pro-Tyr-ONE. All prepd. compds. have ICSO. ltoreq. 15. mu.M in a VLA-4 binding assay. 220302-80-79 220302-82-97 220302-80-97 220302-80-97 220302-80-97 PROSCONDER (TS - TOSYL) (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent) USES (Uses)

(prepn. of N-sulfonylproline dipeptide derivs. and analogs as inhibitors of leukocyte adhesion mediated by VLA-4)
220302-80-7 CAPIUS
L-Phenylalanine, 4 (benzoylamino) N-[{(4R)-5,5-dimethyl-3-{(4-methylphenyl)sulfonyl]-4-thiazolidinyl|carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220302-82-9 CAPLUS L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2002 ACS (CA INDEX NAME) (Continued)

Absolute stereochemistry.

220302-48-7P 220302-59-0P 220302-81-8P
220302-83-0P 220302-87-4P 220302-89-6P
220302-93-1P 220302-87-6P 220303-12-6P
220303-93-97 220303-11-7P 220303-12-6P
220303-17-3P 220303-18-4P 220303-29-P
220303-37-7P 220303-48-6P 220303-29-7P
220303-37-7P 220303-71-P 220303-71-P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SFN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of N-sulfony)proline dispettide derivs, and analogs as inhibitors of leukocyte adhesion mediated by VLA-4)
L-Mistiddine, N-[(14R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl)-4-thiazolidinyl]carbonyl]-1-(phenylmethyl)- (9C1) (CA INDEX NAME)

Absolute stereochemistry.

220302-59-0 CAPLUS
L-Histidine, N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4thiazolidinyl]carbonyl]-1-(phenylmethyl)-, methyl ester (9CI) (CA INDEX NAME)

# 10007342Page 23 11/15/2002

L11 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220302-81-8 CAPLUS L-Phenylalanine, 4-(benzoylamino)-N-[[(4R)-5,5-dimethyl-3-[(4-mathyl-3-lalfonyl]-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

220302-83-0 CAPLUS L-Tycosine, N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry,

L11 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220302-97-6 CAPLUS
L-Phenylalanine, 4-(acetylamino)-N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220303-02-6 CAPLUS L-Phenylalanine, N-[((4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-4-[(3-pyridinylcarbonyl)amino]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220303-09-3 CAPLUS
L-Phenylalanine, N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-4-[(4-pyridinylcarbonyl)amino]- (9CI) (CA INDEX NAME)

Examiner Anderson 703-605-1157

L11 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 220302-87-4 CAPLUS
L-Phenylalanine, N-[(4R)-5,5-dimethyl-3-[(4-methylphenyl)aulfonyl]-4thiazolidinyl]carbonyl]-4-[(3-pyridinylcarbonyl)amino]- (9CI) (CA INDEX

Absolute stereochemistry.

220302-89-6 CAPLUS
L-Phenylalanine, N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-4-nitro-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220302-92-1 CAPLUS L-Phenylalanine, N-[[(4R)-5,5-dimethyl-3-((4-methylphenyl)sulfonyl)-4-thiazolidinyl]carbonyl]-4-nitro-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220303-11-7 CAPLUS L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220303-12-8 CAPLUS L-Tytosine, N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

# 10007342Page 24 11/15/2002

L11 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 220303-17-3 CAPLUS
CN L-Tyrosine, N-[[(4R)-3-[(4-fluorophenyl)sulfonyl]-4thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 220303-18-4 CAPLUS
CN L-Tyrosine, N-[[(4R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued

RN 220303-28-6 CAPLUS
CN L-Tyrosine, 3-chloro-N-[[(4R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 220303-29-7 CAPLUS
CN L-Tyrosine, 3-chloro-N-[[(4R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 220303-20-8 CAPLUS
CN D-Phenylalanine, 4-[(2-bromobenzoyl)amino]-N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)aulfonyl]-4-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 220303-21-9 CAPLUS CN L-Phenylalanine, 4-[(2-bromobenzoyl)amino]-N-{[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 220303-37-7 CAPLUS
CN L-Tyrosine, 3-chloro-N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 220303-44-6 CAPLUS
CN L-Tyrosine, 3-fluoro-N-[[(4R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester (9Cl) (CA INDEX NAME)

# 10007342Page 25 11/15/2002

L11 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220303-45-7 CAPLUS L-Tyrosine, 3-chloro-0-{1,1-dimethylethyl}-N-{[(4R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-,1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220303-50-4 CAPLUS L-Tyrosine, N-[[(4R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl)carbonyl]-, l-methylethyl ester (9CI) (CA INDEX NAME)

#### L11 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220303-67-3 CAPLUS
L-Phenylalanine, 4-amino-N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester
(9C1) (CA INDEX NAME)

Absolute stereochemistry,

REFERENCE COUNT: THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L11 ANSWER 16 OF 37 CAPLUS COPYRIGHT 2002 ACS

220303-57-1 CAPLUS L-Tyrosine, 3-chloro-N-[{(4R)-5,5-dimethyl-3-[(1-methyl-1H-imidazol-4-yl) sulfonyl]-4-thiazolidinyl]carbonyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220303-66-2 220303-67-3
RL: RCT (Reactant): RACT (Reactant or reagent)
(prepn. of N-sulfonylproline dipeptide derivs. and analogs as
inhibitors of leukocyte adhesion mediated by VLA-4)
220303-66-2 CAPLUS
D-Phenylalanine, 4-amino-N-[[(4R)-5,5-dimethyl-3-[(4methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 17 OF 37 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:113711 CAPLUS DOCUMENT NUMBER: 130:153985

TITLE:

INVENTOR (S):

130:153985
Preparation of N-sulfonylprolylphenylalanine decivatives and analogs as inhibitors of leukocyte adhesion mediated by VLA-4
Thorsett, Eugene D.; Semko, Christopher M.; Pleiss, Michael A.; Lombardo, Louis John; Konradi, Andrei W.; Grant, Francine S.; Dressen, Darren B.; Dappen, Michael S.
Athena Neurosciences, Inc., USA; American Home Products Corporation PCT Int. Appl., 172 pp.
CODEN: PIXXD2
Patent
English

PATENT ASSIGNEE (S):

SOURCE:

DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

	TENT					DATE					DATE						
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		K₽,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW.	MX
		NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE.	SG.	SI.	SK.	SL.	TJ,	TM.	TR.	ŤΤ
		UA,	UG,	US,	UZ,	VN,	YU,	ZV.	AM.	AZ.	BY.	KG.	KZ.	MD,	RU.	TJ.	TM
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SZ.	UG,	ZW.	AT.	BE.	CH.	CY,	DE.	DK.	ES
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US 1997-11200/P 1997/0731

US 1997-903585 Al 199707313

OTHER SOURCE(5): MARPAT 130:153985

AB Disclosed are title compds. R1502NR2CHR3QCHR5COR6 [R1 = (un) substituted alkyl, (un) substituted carple, (un) substituted alkyl, (un) substituted alkyl, (un) substituted alkyl, (un) substituted alkyl, (un) substituted the terocyclyl R2NCHR3 form satd. heterocyclic group with the proviso that when monosubstituted, the substituent on the satd. heterocyclic group is not CO2H: R5 = (CH2)n-aryl, (CH2)n-heteroaryl, n = 1-4; Q = C(X)NR7; R7 = H, slkyl; X = 0, S; R6 = NH2, (un) substituted alkyl, (un) substituted aryl; p = 1-8; R9 = (un) substituted alkyl, (un) substituted cycloalkyl, (un) substituted aryl; and pharmaceutically acceptable salts thereof, with the proviso that when R1 = 2,4,6-Me3C6H2, R2NCHR3 = pyrrolidinyl ting and Q = C(O)NH, then R5. noteq, benzyl with the further proviso that when R1 = 4-MeCGH4, R2NCHR3 = pyrrolidinyl derived from D-proline, and Q = C(O)NH, then R5. noteq, benzyl derived from D-proline, and Q = C(O)NH, then R5. noteq, benzyl derived from D-phenylalanine) which bind VLA-4 (also referred to as integrin alpha.4.beta.1 and CD49d/CD29). Certain of these compds. also inhibit

### 10007342Page 26 11/15/2002

L11 ANSWER 17 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued) leukocyte adhesion and, in particular, leukocyte adhesion mediated by VLA-4. Such compds. are useful in the treatment of inflammatory diseases in a mammalian patient, e.g., human, wherein the disease may be, for example, asthma, Alzheimer's disease, atherosclerosis, AIDS dementia, diabetes, inflammatory bowel disease, rheumatoid atrhitis, tissue transplantation, tumor metastasis and myocardial ischemia. The compds. can also be administered for the treatment of inflammatory brain diseases such as multiple sclerosis. Thus, BDP-mediated coupling of Boc-1-Pro-OI with L-phenylalanine benzyl ester hydrochloride in the presence of N-methylnorpholine, followed by acidic deprotection, sulfonylation with MeSO2Cl, and catalytic deprotection to give desired dipeptide MeSO2-1-Pro-L-Ph-OIR.

IT 20187-53-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological)

220187-53-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological attudy, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREF (Preparation); RACT (Reactant or reagent); USES (Uses) (prepn. of N-sulfony)prolylphenylalanine derivs. and analogs as inhibitors of leukocyte adhesion mediated by VLA-4) 220187-53-1 CAPLUS L-Phenylalanine, N-[[(4R)-3-[(4-cyanophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220187-03-1P 220187-06-4P 220187-35-9P 220187-36-0P 220187-36-0P 220187-52-0P 220187-62-2P 220187-71-3P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SFN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREF (Preparation); USES (Uses) (prepn. of N-sulfonylprolylphenylalanine derivs. and analogs as inhibitors of leukocyte adhesion mediated by VLA-4) 220187-03-1 CAPLUS L-Phenylalanine, N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

L11 ANSWER 17 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

Absolute stereochemistry.

220187-52-0 CAPLUS L-Phenylalanine, N-[[(4R)-3-[[4-(aminothioxomethyl)phenyl]sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry

220187-62-2 CAPLUS

L-Phenylalanine, N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-, sthyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Examiner Anderson 703-605-1157

L11 ANSWER 17 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220187-06-4 CAPLUS
L-Phenylalanine, N-[[(4R)-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220187-35-9 CAPLUS
L-Phenylalanine, N-[[(4R)-3-[(4-methylphenyl)sulfonyl]-4thiazolidinyl]carbonyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

220187-36-0 CAPLUS L-Phenylalanine, N-[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

L11 ANSWER 17 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220187-71-3 CAPLUS
L-Phenylalanine, N-[{(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-1,1-dioxido-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry

REFERENCE COUNT:

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

# 10007342Page 27 11/15/2002

L11 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:113709 CAPLUS DOCUMENT NUMBER: 130:153983 ACCESSION NUMBER: DOCUMENT NUMBER: TITLE: 130:153983

Preparation of N-sulfonylated aminophenylalanine dipeptide derivatives and analogs as inhibitors of leukocyte adhesion mediated by VLA-4
Ashvell, Susan; Grant, Francine 5.; Konradi, Andrei W.; Kreft, Anthony; Lombardo, Louis John; Pleiss, Michael A.; Sarantakis, Dimitrios; Semko, Christopher M.; Thorsett, Eugene D.
Athena Neurosciences, Inc., USA; American Home Products Corporation
PCT Int. Appl., 164 pp.
CODEN: PIXXD2
Patent INVENTOR(S): PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: English 1 FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE

A 20000718 BR 1998-12118 19980730
A 20000328 NO 2000-411 20000127
US 1997-92053 A1 19970730
WO 1998-US15312 W 19980730
MARPAT 130:153983 OTHER SOURCE(S):

1

L11 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220149-12-2 CAPLUS
2(1H)-Isoquinolinecarboxylic acid, 3-[[[4-[(2R)-3-(1,1-dimethylethoxy)-2-[[[(4R)-2,2-dimethyl-3-(4-methyl)henyl]-at-thiazolidinyl]carbonyl]amino]-3-oxopropyl]phenyl]amino]carbonyl]-3,4-dihydro-, 1,1-dimethylethyl ester, (3S)- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 18 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

ANSWER 18 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

Disclosed are title compds. RISO2NR2CHB3CCHB5COR6 [R1 = (un) substituted alkyl, (un) substituted aryl, (un) substituted very composed alkyl, (un) substituted heterocyclyl; R2 = H, any group R1; R1R2 may form (un) substituted heterocyclic ring; R3 = H, any group R1; R2R3 may form (un) substituted heterocyclic ring; R3 = H, any group R1; R2R3 may form (un) substituted heterocyclic ring; R3 = H, any group R1; R2R3 may form (un) substituted heterocyclic ring; R13 = satd. heterocycle; C2; NRSR8; NR12c(2)R13; R12 = H, alkyl, aryl; R8, R8' = independently H, any group R1; R8R8' may; (CH2)n-heterocycli; ring; R13 = satd. heterocycle; 2 = 0 S, RM33 x = -4; (CH2)n-heterocycly; n = 1-4; Q = C(K)NR7; R7 = H, alkyl; X = 0; S; R6 = NNIZ, (un) substituted alkoxy, (un) substituted cycloalkoxy, succinimityloxy, adamantylamino, beta-cholest-S-en-3-yloxy, NHOY, NR(CH2)pCOZY, CH2NR9R10; Y = H, (un) substituted alkyl, (un) substituted aryl; p = 1-8; R9 = (un) substituted CO-aryl; R10 = H, CR2CO2R1, NHSO22; R1 = alkyl; Z = (un) substituted alkyl, (un) substituted heterocyclyl; and pharmaceutically acceptable salts thereof, with provisos) which bind VLA-4 (also referred to as integrin .alpha.4. beta.1 and CD494/CD23). Certain of these compds. also inhibit leukocyte adhesion and, in particular, leukocyte adhesion mediated by VLA-4. Such compds. are useful in the treatment of inflammatory diseases in a mammalian patient, e.g., human, wherein the disease may be, for example, asthma, Alzheimer's disease, atherosclerosis, AIDS dementia, diseates, inflammatory browel disease, thematoid arthritis, tissue transplantation, tumor metastasis and myocardial ischemia. The compds. can also be administered for the treatment of inflammatory brain diseases such as multiple solerosis. Thus, condensation of N-tosyl-1-prolyl-4-amino-1-phenylalanine Me ester with 3-phenylpropyl isothiocyanate gave the corresponding urea I. 220149-11-1P 220149-12-29

(R: BAC (Biological stivity or effector, except adv

Absolute stereochemistry.

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L11 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2002 ACS
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1399:113707 CAPLUS
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		CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG							
ΑU	9885	850		A.	1	1999	0222		A	U 19	98-8	5850		1998	0731			
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PRIORIT	Y APP	LN. 1	NFO.	:				ı	JS 1	997-	9044:	۱7	A1	19970	731			
								· ·	JS 1	997-	10042	9P	P	19970	731			
								V	7O 1	998-	J\$153	325	w	19980	731			
OTHER S	SURCE	18) .			MADI	DAT 1	30.1						-					

US 1997-100429P P 19970731
W0 1998-US15325 W 19980731
Disclosed are title compds. RISO2NR2CHR3QCHRSCOR6 [RI = (un) substituted alkyl, (un) substituted heterocyclyl, R2 = H, any group RI; RIR2 may form (un) substituted heterocyclic ring; R3 = H, any group RI; RIR2 may form (un) substituted heterocyclic ring; R5 = Alk-XI; CHY; Alk = alkyl chain of 1-10 carbon atoms; X1 = halo, CN, NO2, optionally substituted sulfonyl, sulfonylowy, amino, alkyl, arylowy, aryl, arylowyaryl, carboxyalkyl, carboxyhyth, carboxyhytheroaryl, cho, substituted choxy, succinimidyloxy, adamantylamino, beta.-cholest-5-en-3-yloxy, NHOY, NNI(CH2)cpCO2Y, CCHINNSNID; Y = H, (un) substituted alkyl, (un) substituted alkyl, (un) substituted cycloalkyl, (un) substituted alkyl, (un) substituted cycloalkyl, (un) substituted alkyl, (un) substituted alkyl, (un) substituted cycloalkyl, (un) substituted alkyl, (un) substituted alkyl, (un) substituted cycloalkyl, (un) substituted alkyl, (un) substituted alky

### 10007342Page 28 11/15/2002

L11 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued) for example, asthma, Alzheimer's disease, atherosclerosis, AlDS dementia, diabetes, inflammatory bowel disease, rheumatoid arthritis, tissue transplantation, tumor metastasis and myocardial ischemia. The compds. can also be administered for the treatment of inflammatory brain diseases such as multiple sclerosis. Thus, BOP-mediated peptide coupling of To-Pro-OH (Ts - tosyl) with H-Asp(COM-S)-OHE-HCl, followed by alpha.-ester sapon., gave gave desired title compd. Ts-Pro-Asp(OCHe3)-OH. All prepd. compds. have ICSO .ltoreq. 15 .mu.M in a VLA-4 binding assay.

II 20176-30-7P

22016-30-7P

AL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (prepn. of N-sulfonyl dispetide derivs. and analogs as inhibitors of leukocyte adhesion mediated by VLA-4)

220176-30-7 (APLUS

L-Lysine, N6-((1,1-dimethylethoxy)carbonyl]-N2-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-, methyl ester (9CI) (CA HODEN ARME)

Absolute stereochemistry.

220176-31-8P 220176-32-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified): SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of N-sulfonyl dipeptide derivs. and analogs as inhibitors of leukocyte adhesion mediated by VLA-4)
220176-31-8 CAPLUS
L-Lysine, NG-[(1,1-dimethylethoxy)carbonyl]-N2-[((4R)-5,5-dimethyl-3-[(4-methyl)sulfonyl]-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

INVENTOR(S):

PATENT ASSIGNEE(S):

BOUNCE:

SOURCE:

COODEN: PIXXD2

DOCUMENT TYPE:
LANGUAGE:
EAST.

PATENT INFORMATION:

PATENT NO.

PRIORITY APPLN. INFO .:

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, BS, SI, LT, LV, FI, RO

BR 9812114 A 20000718 BR 1998-12114 19980730

MD 2001512134 T 2 20010821 JP 2000-505186 19980730

MD 2000000450 A 20000328 MD 2000-505186 19980730

MD 2000000450 A 20000328 MD 2000-505180 19980730

MD 20000000450 A 20000328 MD 2000-505180 19980730

MRAPAT 130:168661

Disclosed are title compds. RISOZNN2CHR3CQRHSCORG [RI = (un) substituted alkyl, (un) substituted aryl, (un) substituted aryl, (un) substituted heterocyclyl, R2 = H, any group R1, RR2 may form (un) substituted heterocyclyl, R2 = H, any group R1, RR2 may form (un) substituted heterocyclic ring; R5 = (CH2)x-Ar-R5'; R5' = substituted heterocyclic ring; R5 = (CH2)x-Ar-R5'; R5' = substituted heterocyclic ring; R5 = (CH2)x-Ar-R5'; R5' = substituted alkyl, (un) substituted alkyl, (un) substituted aryl, (un) substituted alkyl, anyl, etc., each R = H, any group R1, Ar = (un) substituted aryl, or heteroaryl, X = 1-44, Q = (CK), MR7; R7 = H, alkyl; X = 0, S; R6 = NH2, (un) substituted alkoxy, (un) substituted cycloalky, (un) substituted alkoxy, (un) substituted alkyl, (un) substituted alkyl, (un) substituted cycloalkyl, (un) substituted heterocyclyl; and pharmaceutically acceptable salts thereof, with provisos] which bind VLA-4 (albo referred to as inhegrin .alpha.4.beta.1 and CD49d/CD29). Certain of these compds. also inhibit leukocyte adhesion and, in particular, leukocyte adhesion mediated aminer Anderson 703-605-1157

Examiner Anderson 703-605-1157

L11 ANSWER 19 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220176-32-9 CAPLUS L-Asparagine, N2-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 20 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)
by VLA-4. Such compds. are useful in the treatment of inflammatory
diseases in a mammalian patient, e.g., human, wherein the disease may be,
for example, asthma, Alzheimer's disease, atherosclerosis, AIDS dementia,
diabetes, inflammatory bowed disease, rheumatoid arthritis, tissue
transplantation, tumor metastasis and myocardial ischemia. The compds.
can also be administered for the treatment of inflammatory brain diseases
such as multiple sclerosis. Thus, BOP-mediated peptide coupling of
Tis-Pro-Phe(4-NIS)-OMe (Ts = tosyl) with Boc-Gly-OH, followed by sapon.,
gave desired title compd. Ts-Pro-Phe(4-Boc-Gly-MH)-OH. All prepd. compds.
have ICSO .ltoreq. 15 .mu.H in a VLA-4 binding assay.
220397-12-6P 220397-28-4P 220397-28-9P
220397-17-19 220397-70-6P 220397-72-8P
220397-78-4P 220398-05-OP 220398-08-3P
220398-28-4P 220398-28-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified) SFN (Synthetic preparation); THU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of N-sulfonyl phenylalanie dispertide derivs. and analogs as
inhibitors of leukocyte adhesion mediated by VLA-4)
20397-12-6 CAPLUS
L-Tyrosine, O-[3-(dimethylamino)propyl]-N-[[(4R)-5,5-dimethyl-3-[(4methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220397-28-4 CAPLUS L-Tyrosine, O-[3-(dimethylamino)propyl]-N-[((4R)-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220397-30-8 CAPLUS L-Tyrosine, N-[[(4R)-3-[(4-cyanophenyl)sulfonyl]-5,5-dimethyl-4-

# 10007342Page 29 11/15/2002

L11 ANSWER 20 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued) thiazolidinyl]carbonyl]-O-[3-(dimethylamino)propyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220397-67-1 CAPLUS
L-Phenylalanine, 4-[[[(1,1-dimethylethoxy)carbonyl]methylamino]acetyl]ami
no]-N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl]sulfonyl]-4thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220397-70-6 CAPLUS L-Phenylalanine, N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-4-[[(methylamino)acetyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 20 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220398-05-0 CAPLUS L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-0-(1-methyl-4-piperidinyl)-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220398-08-3 CAPLUS L-Tyrosine, N-[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl[carbonyl]-0-(1-methyl-4-piperidinyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220398-25-4 CAPLUS
L-Tyrosine, O-[3-(dimethylamino)propyl]-N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)]-ulfonyl]-4-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Examiner Anderson 703-605-1157

L11 ANSWER 20 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220397-72-8 CAPLUS
L-Phenylalanine, 4-[[(dimethylamino)acetyl]amino]-N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220397-78-4 CAPLUS
L-Tyrosine, O-{3-(dimethylamino)propyl}-N-{[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-, ethyl ester (9CI) (CA INDEX NAME)

L11 ANSWER 20 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued) Absolute stereochemistry.

220398-28-7 CAPLUS L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-0-(4-methyl-1-piperidinyl)-, l,l-dimethylethylester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220398-43-6P
RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation): RACT (Reactant or reagent)
(prepn. of N-sulfonyl phenylalanine dipeptide derivs. and analogs as inhibitors of leukocyte adhesion mediated by VLA-4)
220398-43-6 CAPLUS
L-Tyrosine, O-[3-(dimethylamino)propyl]-N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl]sulfonyl]-4-thiazolidinyl]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

### 10007342Page 30 11/15/2002

L11 ANSWER 20 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

.alpha.y-integrin antagonists and anti-ir compositions
Yednock, Theodore A.; Pleiss, Michael A. Athena Neurosciences, Inc., USA
PCT Int. Appl., 60 pp.
CODEN: PIXXD2
Patent
English
2 INVENTOR(S): PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE n. Ai, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, JU, NU, SE, MC, PT, IE, FI

JP 201502361 T2 20010220 JP 1999-511273 19980731
US 2002039745 A1 20020404 US 1998-127364 19980731
OSTITY APPLN. INFO:
US 1997-504437 P 19970801
W0 1999-US15958 V 19980731

ER SOURCE(S):
MARPAT 130:177528
Pharmaceutical compns. and methods are provided for treating inflammatory conditions, particularly those that are characterized by increased binding of .alpha.9-integrin to one or more of its ligands. Also disclosed are methods for selecting compds. for use in such compns. and methods. 220544-01-4P 220544-02-5P 220544-01-8P

RL: RCT (Reactant): SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction; .alpha.9-integrin antagonists and anti-inflammatory compns.)
220544-01-4 CAPLUS
L-Tyrosine, N-[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester, dimethylcarbamate (ester)

Absolute stereochemistry.

L11 ANSWER 21 OF 37 CAPLUS COPYRIGHT 2002 ACS

220544-02-5 CAPLUS L-Tyrosine, N-[(44R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester, dimethylcarbamate (ester) (9C1) (CA INDEX NAME)

Absolute stereochemistry.

220544-21-8 CAPLUS L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-1,1-dioxido-4-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester, dimethylcarbamate (ester) (GCI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 21 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220397-12-6 220544-23-0 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(Jees)
(.alpha.9-integrin antagonists and anti-inflammatory compns.)
220397-12-6 CAPUS
L-Tyrosine, O-[3-(dimethylamino)propyl]-N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl)carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220544-23-0 CAPLUS

L-Tyrosine, N-[((4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-1,1-dioxido-4-thiazolidinyl]carbonyl]-, dimethylcarbamate (ester) (9CI) (CA INDEX

# 10007342Page 31 11/15/2002

L11 ANSWER 21 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220544-03-6P

RE: SPN (Synthetic preparation); PREP (Preparation)
(.alpha.9-integrin antagonists and anti-inflammatory compns.)
220544-03-6 CAPLUS
L-Tycosine, N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

2

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)
CH2CO2R11, NH502Z'; R11 = alky1; Z' = (un) substituted alky1,
(un) substituted cycloalky1, (un) substituted alky1, (un) substituted exploalky1, (un) substituted heteroary1, and pharmaceutically acceptable salts thereof, with provision] which bind VLA-4 local referred to as integrin .alpha.4.beta-1 and CD49d/CD29). Certain of these compds. also integrin .alpha.4.beta-1 and CD49d/CD29). Certain of these compds. also be demined and an aparticular, laudocyte adhesion mediated by VLA-4. Such compds. are useful in the treatment of inflammatory brain diseases may be, for example, asthma. Alzheimer's disease, athereoclerosis, AlDS dementia, diabetes, inflammatory brain diseases are transplantation, tumor metastasis and myocardial inchemia. The compds. can also be administered for the treatment of inflammatory brain diseases such as multiple sclerosis. Thus, carbamoylation of Ta-Pro-Tyr-CDC1 (Tg tosyl) with McMCOC1 in the presence of Et3N and DMAP gave 994 desired title compd. Ts-Pro-Tyr(CONMe2)-OEt (1). Spon. of I gave the corresponding free acid Ta-Pro-Tyr-CDCMe2)-OH. All prepd. compds. have ICSO .ltoreq. 15 .mu.H in a VLA-4 binding assay.

IZ 20544-01-4P 220544-01-5P 220544-05-9P 220544-01-9P 220545-01-9P 220546-01-9P 220546-

Absolute stereochemistry

Examiner Anderson 703-605-1157

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1999:113666 CAPLUS DOCUMENT NUMBER: 130:182768 Prenaration of W. F.

INVENTOR(S):

130:182768
Preparation of N-sulfonyl O-carbamoyltyrosine dipeptide derivatives and analogs as inhibitors of leukocyte adhesion mediated by VIA-4
Thorsett, Eugene D.; Semko, Christopher M.;
Sarantakis, Dimitrios; Pleiss, Michael A.; Kreft, Anthony, Konradi, Andrei W.; Grant, Francine S.;
Dressen, Darren B.; Ashwell, Susan; Baudy, Reinhardt Bernhard; Lombardo, Louis John
Athena Neurosciences, Inc., USA; American Home
Products Corporation

PATENT ASSIGNEE(S):

Athena Neurosciences, I Products Corporation PCT Int. Appl., 386 pp. CODEN: PIXXD2 Patent English 2

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

				KI	ND	DATE	:	APPLICATION NO. DATE											
WO	0 9906390		A1 19990211					W	0 19	98-U	S153	24	19980731						
	1	W:	ΑL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU.	cz.	DE.	
			DK,	EE,	ES,	FI,	GB,	GE,	GH.	GM.	HR.	HU.	ID.	IL.	IS,	JP.	KE.	KG.	
			ΚP,	KR,	KZ,	LC,	LK,	LR.	LS,	LT.	LU.	LV.	MD.	MG.	MK,	MN.	MW.	MX.	
			NO,	NZ.	PL,	PT.	RO.	RU.	SD.	SE.	SG.	SI.	SK.	SL.	TJ,	TM.	TR.	тт	
			UA,	UG.	US.	US,	UZ.	VN.	YU.	ZW.	AM.	AZ.	BY.	KG.	KZ,	MD.	RII.	T.3	тм
		RW:	GH.	GM.	KE.	LS.	MW.	SD.	52.	HG.	2W.	AT.	BE.	CH	CY,	DE,	DK.	rc,	•••
			FI.	FR.	GB.	GR.	IE.	IT.	LU.	MC.	NI.	PT.	SE.	BF.	BJ,	CE,	CG,	CI,	
			CM.	GA,	GN.	GW.	ML.	MR.	NE.	SN.	TD.	TG	J.,	٠.,	20,	CI,	ÇG,	С1,	
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	•		75	DE,	Cn,	UE,	DK,	£5,	PK,	GB,	GK,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
				SI,															
ВК	98	211:	98		A		2000	1003		B	R 199	98-11	1598		19980	731			
JP	20	0015	121	14	T	2 :	2001	0821		J)	P 200	00-50	05149	€.	19980	731			
US	20	0020	397	45	A:	Ł;	2002	0404		U:	199	98-12	27364	1	19980	731			
RIORIT'	Y	APPI	N.	INFO.	. :										19970				
									τ	JS 19	997-5	4453	3P	P	19970	1080			
										in 19	1-896	15153	124	w	10081	1731			

US 1997-54453F P 19970801

OTHER SOURCE(5): MARPAT 130:182768

AB Disclosed are title compds. RISOZNRZCHR3QCHR5COR6 [R1 = (un) substituted alky1, (un) substituted ary1, (un) substituted cycloalky1, (un) substituted heterocycly1r R2 = H, any group R1r R1R2 may form (un) substituted heterocyclic ring; R3 = (H2)x-Ar-R5r, R5 = 02NR8R8\*, 02R12; R8, R8\* = independently H, (un) substituted alky1, (un) substituted cycloalky1, (un) substituted heterocycly1; Z = CO, SO2r Ar = (un) substituted ary1 or heteroary1; x = 1-4; Q = C(K)NR7; R7 = H, alky1: X = 0, S; R6 = NR2. (un) substituted akky, (un) substituted cycloalky1, whole the cycloalky1, whole the cycloalky1, whole the cycloalkowy, succinimidy1oxy, adamanty1amino, beta-cholest-5-en-3-yloxy, NNOY, NHOY, NHOY, NHOY, NGCY, OCHANPRIO; Y = H, (un) substituted alky1, (un) s

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 220544-02-5 CAPLUS
CN L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester, dimethylcarbamate
(ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220544-06-9 CAPLUS
L-Tycosine, N-[((4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4thiazolidinyl]carbonyl]-, l,1-dimethylethyl ester, 4-methyl-1piperazinecarboxylate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220544-21-8 CAPLUS L-Tyrosine, N-[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-1,1-dioxido-4-thiazolidnyl]carbonyl]-,1,1-dimethylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

# 10007342Page 32 11/15/2002

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued) Absolute stereochemistry.

220544-52-5 CAPLUS L-Tyrosine, N-[(4(R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, l,1-dimethylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

220544-57-0 CAPLUS L-Tyrosine, N-[(44R)-5,5-dimethyl-3-{[4-(trifluoromethoxy)phenyl]sulfonyl]-4-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (ester) (9CI) (CA INDEX NAME) (Continued)

Absolute stereochemistry.

220544-69-4 CAPLUS L-Tyrosine, N-[[(4R)-3-[(4-fluorophenyl)sulfonyl]-1,1-dioxido-4-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220544-99-0 CAPLUS L-Tyrosine, N- $\{[(4R)-5,5-dimethyl-3-[(phenylmethyl)sulfonyl]-4-thiazolidinyl[carbonyl]-, 1,1-dimethylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)$ 

Absolute stereochemistry.

Examiner Anderson 703-605-1157

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued) Absolute stereochemistry.

220544-59-2 CAPLUS L-Tyrosine, N-[(4R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-1,1-dioxido-4-thiazolidinyl]carbonyl]-,1,1-dimethylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220544-68-3 CAPLUS L-Tycosine, N-[[(4R)-3-[(4-fluorophenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester, dimethylcarbamate

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

 $220545-24-4 \quad CAPLUS \\ L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-[\{l-methyl-1H-pyrazol-4-yl)sulfonyl]-4-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)$ 

Absolute stereochemistry.

220545-25-5 CAPLUS L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-[(1-methyl-1H-pyrazol-4-yl)sulfonyl]-4-thiazolidinyl]carbonyl]-, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

# 10007342Page 33 11/15/2002

# L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220545-48-2 CAPLUS L-Tyrosine, N-[(4R)-5,5-dimethyl-3-[(1-methyl-1H-pyrazol-4-yl)sulfonyl]-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester, dimethylcarbamate (ester) (9C1) (CA INDEX NAME)

### Absolute stereochemistry.

220545-59-5 CAPLUS L-Tycosine, N-[((4R)-5,5-dimethyl-3-(3-pyridinylsulfonyl)-4-thiazolidinyl)carbomyl]-, 1-methylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

### L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220545-97-1 CAPLUS L-Tyrosine, N- $\{[(4R)-5,5-dimethyl-3-(2-pyridinylsulfonyl)-4-thiazolidinyl[carbonyl]-, 1-methylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)$ 

### Absolute stereochemistry.

220546-39-4 CAPLUS
L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-(8-quinolinylsulfonyl)-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester, dimethylcarbamate (ester)
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

#### L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220545-84-6 CAPLUS L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]-arbonyl]-, 1,1-dimethylethyl ester, 4-thiomorpholinecarboxylate (ester) (9CI) (CX INDEX NAME)

### Absolute stereochemistry.

220545-91-5 CAPLUS L-Tyrosine, N-[((4R)-5,5-dimethyl-3-(3-pyridinylsulfonyl)-4-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

### L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS

220546-63-4 CAPLUS L-Tyrosine, N-{(4R)-5,5-dimethyl-3-{(1-methyl-1H-pyrazol-3-yl)sulfonyl}-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

220546-65-6 CAPLUS L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-(4-pyridinylsulfonyl)-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

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L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220546-67-8 CAPLUS L-Tyrosine, N-[(44M)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl|carbonyl]-, 1,1-dimethylethyl ester, [2-(dimethylamino)ethyl]methylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220547-27-3 CAPLUS L-Tyrosine, N-[((4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl[carbonyl]-, 1,1-dimethylethyl ester, 1,4-piperazinedicarboxylate (2:1) (ester) (9Cl) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220551-48-4 CAPLUS
L-Tyrosine, 3-chloro-N-[[(4R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

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Absolute stereochemistry.

220544-03-6P 220544-07-0P 220544-23-0P 220544-51-4P 220544-60-5P 220544-63-8P 220544-78-5P 220544-78-5P 220544-78-5P 220545-87-P 220545-87-P 220545-87-P 220545-91-P 220545-91-P 220545-91-P 220545-91-P 220545-19-0P 220546-11-4P 220546-51-4P 220546-51-4P

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L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

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220551-45-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of N-sulfonyl O-carbamoyltycosine dipeptide derivs. and analogs as inhibitors of leukocyte adhesion mediated by VLA-4) 220544-03-6 CAPLUS

L-Tycosine, N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220544-07-0 CAPLUS L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-, 4-methyl-1-piperazinecarboxylate (ester) (9CI) (CA INDEX NAME)

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L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 220544-23-0 CAPLUS
CN L-Tyrosine, N-[((4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-1,1-dioxido-4-thiazolidinyl]carbonyl]-, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 220544-51-4 CAPLUS
CN L-Tyrosine, N-[([4R]-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4thiazolidinyl]carbonyl]-, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 220544-78-5 CAPLUS
CN L-Tyrosine, N-{[(4R)-5,5-dimethyl-3-[[4-(trifluoromethoxy)phenyl]sulfonyl]4-thlazolidinyl]carbonyl]-, dimethylcarbamate (ester) (9CI) (CA INDEX
NAME)

Absolute stereochemistry.

$$F_{3}C \xrightarrow{0} 0 0 CO_{2}H \xrightarrow{0} 0 NMe_{2}$$

$$\downarrow 0 0 CO_{2}H \qquad \downarrow 0 NMe_{2}$$

$$\downarrow 0 0 NMe_{2}$$

$$\downarrow 0 0 NMe_{2}$$

$$\downarrow 0 0 NMe_{2}$$

$$\downarrow 0 0 NMe_{2}$$

RN 220544-96-7 CAPLUS
CN L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-[(phenylmethyl)sulfonyl]-4thiazolidinyl]carbonyl]-, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 220545-85-7 CAPLUS
L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4thiazolidinyl]carbonyl]-, 4-thiomorpholinecarboxylate (ester) (9CI) (CA
INDEX NAME)

Examiner Anderson 703-605-1157

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued

RN 220544-60-5 CAPLUS
CN L-Tyrosine, N-[((4R)-5,5-dimethyl-3-((4-methylphenyl)sulfonyl)-1,1-dioxido-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 220544-63-8 CAPLUS
CN L-Tyrosine, N-[((4R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-1,1-dioxido-4-thiazolidinyl]carbonyl]-, dimethylcarbamate (ester) (9Cl) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

Absolute stereochemistry.

RN 220545-87-9 CAPLUS
CN L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-{(1-methyl-1H-pyrazol-4-yl)sulfonyl]-4thiazolidinyl]carbonyl]-, ethyl ester, dimethylcarbamate (ester) (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

RN 220545-89-1 CAPLUS
CN L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-(3-pyridinylsulfonyl)-4-thiazolidinyl]carbonyl]-, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

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ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)
220545-99-3 CAPLUS
L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-(2-pyridinylsulfonyl)-4-thiazolidinyl]carbonyl)-, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

220546-03-2 CAPLUS L-Tyrosine, N-[[(4R)-3-[(3-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester, dimethylcarbamate (ester) (9C1) (CA INDEX NAME)

220546-05-4 CAPLUS L-Tyrosine, N-[[(4R)-3-[(2-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS Absolute stereochemistry.

220546-11-2 CAPLUS L-Tyrosine, N-[[(4R)-3-{(2,4-difluorophenyl)sulfonyl}-5,5-dimethyl-4-thiazolidinyl]carbonyl}-, 1-methylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220546-13-4 CAPLUS
L-Tyrosine, N-[[(4R)-3-[(4-chlorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester, dimethylcarbamate (ester)
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

Examiner Anderson 703-605-1157

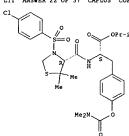
L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS

220546-07-6 CAPLUS L-Tyrosine, N-[(4R)-3-[(3,4-difluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220546-09-8 CAPLUS L-Tyrosine, N-[(4R)-3-[(3,5-difluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)



220546-15-6 CAPLUS L-Tyrosine, N-[([(4R)-3-{(3-chlorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220546-17-8 CAPLUS L-Tyrosine, N-[(4R)-3-[(2-chlorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester, dimethylcarbamate (ester) (9Cl) (CA INDEX NAME)

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L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 220546-19-0 CAPLUS
CN L-Tyrosine, N-{{(4R)-3-{(3,4-dichlorophenyl)sulfonyl}-5,5-dimethyl-4-thiazolidinyl}carbonyl}-, 1-methylethyl ester, dimethylcarbamate (ester)
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 220546-20-3 CAPLUS
CN L-Tyrosine, N-[(4R)-3-[(3,5-dichlorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyllacarbonyl]-, 1-methylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 220546-25-8 CAPLUS
CN L-Tyrosine, N-[(4R)-3-((2-methoxyphenyl)sulfonyl]-5,5-dimethyl-4-thiazoldinyl]carbonyl]-, l-methylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 220546-26-9 CAPLUS
CN L-Tyrosine, N-[[(4R)-3-[(3,4-dimethoxyphenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, l-methylethyl ester, dimethylcarbamate (ester)
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

Examiner Anderson 703-605-1157

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued) Absolute stereochemistry.

RN 220546-23-6 CAPLUS
CN L-Tyrosine, N-[[(4R)-3-[(4-methoxyphenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester, dimethylcarbamate (ester)
(9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 220546-24-7 CAPLUS
CN L-Tyrosine, N-{{(4R)-3-[(3-methoxyphenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester, dimethylcarbamate (ester)

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

Absolute stereochemistry.

RN 220546-35-0 CAPLUS
CN L-Tytosine, N-[[(4R)-3-{(2,5-dichloro-3-thienyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl] (arbonyl)-, 1-methylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

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L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220546-36-1 CAPLUS L-Tyrosine, N-[{(4R)-5,5-dimethyl-3-[{l-methyl-1H-pyrazol-4-yl)sulfonyl}-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester, 4-thiomorpholinecarboxylate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220546-40-7 CAPLUS
L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-{8-quinolinylsulfonyl}-4-thiazolidinyl]carbonyl]-, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 220546-46-3 CAPLUS
CN L-Tytosine, N-[(14R)-5,5-dimethyl-3-[(1-methyl-1H-pyrazol-4-yl)sulfonyl]-4thiazolidinyl[carbonyl]-, cyclopropylmethyl ester, dimethylcarbamate
(ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

 $220546-47-4 \quad CAPLUS \\ L-Tyrosine, \ N-\{[(4R)-5,5-dimethyl-3-[\{1-methyl-1H-pyrazol-4-yl\}sulfonyl]-4-thiazolidinyl]carbonyl]-, methyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)$ 

Absolute stereochemistry.

220546-48-5 CAPLUS
L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-(3-pyridinylsulfonyl)-4-thiazolidinyl]carbonyl]-, ethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220546-44-1 CAPLUS L-Tyrosine, N-[(4R)-5,5-dimethyl-3-[(1-methyl-1H-pyrazol-4-yl)sulfonyl]-4-thiazolidinyl]carbonyl]-, 2,2-dimethylpropyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220546-45-2 CAPLUS L-Tyrosine, N-[(4R)-5,5-dimethyl-3-(3-pyridinylsulfonyl)-4-thiazolidinyl]carbonyl]-, 2,2-dimethylpropyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220546-49-6 CAPLUS L-Tyrosine, N-[(4R)-5,5-dimethyl-3-(3-pyridinylsulfonyl)-4-thiazolidinyl]carbonyl]-, cyclopropylmethyl ester, dimethylcarbamate (ester) (9Cl) (CA INDEX NAME)

Absolute stereochemistry.

220546-50-9 CAPLUS L-Tyrosine, N-[(I4R)-5,5-dimethyl-3-[(1-methyl-1H-pyrazol-4-yl)sulfonyl]-4-thiazolidinyl[carbonyl]-, 2-methoxyphenyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220546-51-0 CAPLUS

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L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

CN L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-[(1-methyl-1H-pyrazol-4-yl)sulfonyl]-4thiazolidinyl]carbonyl]-, butyl ester, dimethylcarbamate (ester) (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

220546-52-1 CAPLUS L-Tyrosine, N-[(4R)-5,5-dimethyl-3-[(1-methyl-1H-pyrazol-4-yl)sulfonyl]-4-thiazolidinyl[carbonyl]-, propyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220546-53-2 CAPLUS L-Tyrosine, N-[{(4R)-5,5-dimethyl-3-{(1-methyl-1H-pyrazol-4-yl)sulfonyl}-4-thiazolidinyl]carbnyl]-, (2,2-dimethyl-1-oxopropoxy)methyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4thiazoldidnyl]carbonyl]-, [2-(dimethylamino)ethyl]methylcarbamate (ester)
(9CI) (CA INDEX NAME)

220546-71-4 CAPLUS L-Tyrosine, 3-chloro-N-[[(4R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl[carbonyl]-, 1,1-dimethylethyl ester, 4-methyl-1-piperazinecarboxylate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220546-72-5 CAPLUS

L-Tyrosine, 3-chloro-N-[[(4R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220546-64-5 CAPLUS
L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-[(1-methyl-1H-pyrazol-3-yl)sulfonyl]-4-thiazolidinyl]carbonyl]-, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220546-66-7 CAPLUS L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-(4-pyridinylsulfonyl)-4-thiazolidinyl]carbonyl]-, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 220546-69-0 CAPLUS

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220546-73-6 CAPLUS L-Tyrosine, 3-chloro-N-[[{4R}-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester, 4-thiomorpholinecarboxylate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220546-74-7 CAPLUS
L-Tyrorine, 3-chloro-N-[{(4R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester, 4-thiomorpholinecarboxylate (ester) (9CI) (CA INDEX NAME)

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#### L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220546-75-8 CAPLUS L-Tyrosine, 3-chloro-N-[[{4R}-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

#### Absolute stereochemistry.

220546-76-9 CAPLUS L-Tyrozine, 3-chloro-N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

#### L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220546-80-5 CAPLUS L-Tyrosine, 3-chloro-N-[[(4R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester, 4-(3-pyridinyl)-1-piperazinecarboxylate (ester) (9C1) (CA INDEX NAME)

### Absolute stereochemistry.

220546-86-1 CAPLUS L-Tyrosine, N-[(dR)-3-[(l-butyl-1H-pyrazol-4-yl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, l-methylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

### Examiner Anderson 703-605-1157

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220546-77-0 CAPLUS L-Tyrosine, 3-chloro-N-[[(4R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, 1-methylethyl ester, 4-methyl-1-piperazinecarboxylate (ester) (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

220546-79-2 CAPLUS L-Tyrosine, 3-chloro-N-[[(4R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyllcarbonyl]-, 1-methylethyl ester, 4-(3-pyridinyl)-1-piperazinecarboxylate (ester) (9CI) (CA INDEX NAME)

#### Absolute stereochemistry.

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-[(4-methylphenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-, 1,4-piperazinedicarboxylate (2:1) (ester) (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

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### L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

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220547-29-5 CAPLUS L-Tyrosine, N-[(4/R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl|carbonyl]-, l-methylethyl ester, 2-(hydroxymethyl)-1-pyrrolidinecarboxylate (ester) (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

### L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220547-35-3 CAPLUS L-Tyrosine, N-[((4R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester, 4-(2-pyridinyl)-1-piperazinecarboxylate (ester) (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

220547-38-6 CAPLUS
L-Tyrosine, N-[(4/R)-3-(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4thiazolidinyl]carbonyl]-, 1-methylethyl ester, 4-(2-pyrimidinyl)-1piperazinecarboxylate (ester) (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

# Examiner Anderson 703-605-1157

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220547-30-8 CAPLUS L-Tyronine, N-[(4R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, 2-(hydroxymethyl)-1-pyrrolidinecarboxylate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220547-33-1 CAPLUS L-Phenylalanine, 3-chloro-N-[[(4R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-4-(4-thiomorpholinyl)- (9CI) (CA INDEX NAME)

#### Absolute stereochemistry.

220547-34-2 CAPLUS L-Tyrosine, N-[(4R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, 4-(2-pyridinyl)-l-piperazinecarboxylate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

### L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220547-39-7 CAPLUS L-Tyrosine, 3-fluoro-N-[[{4R}-3-[{4-fluorophenyl}sulfonyl]-5,5-dimethyl-4-thiazolidinyl|carbonyl]-, 1-methylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

220547-42-2 CAPLUS L-Tyrosine, N-[(4R)-3-[(4-bromophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester, dimethylcarbamate (ester) [9CI) (CA INDEX NAME]

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L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220547-43-3 CAPLUS
L-Tyrosine, N-[{(4R)-3-[(4-bromophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220547-45-5 CAPLUS L-Tyrosine, N-[(4R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, 4-(2-pyrimidinyl)-1-piperazinecarboxylate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220547-48-8 CAPLUS L-Tycosine, N-[([25)-3-[(4-fluorophenyl)sulfonyl]-2-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220547-51-3 CAPLUS L-Tyrosine, N-[[(2S)-3-[(4-fluorophenyl)sulfonyl]-2-thiazolidinyl]carbonyl]-, 4-(2-pyridinyl)-1-piperazinecarboxylate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220547-46-6 CAPLUS L-Tyrcsine, N-[(4R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl-, 1-methylethyl ester, 4-(2-pyridinyl)-1-piperazinecarboxylate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220547-47-7 CAPLUS
L-Tyrosine, N-[{(2S)-3-{(4-fluorophenyl)sulfonyl}-2-thiazolidinyl]carbonyl}-, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220547-53-5 CAPLUS L-Tyrosine, N-[([25]-3-[(4-fluorophenyl)sulfonyl]-2-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester, 4-(2-pyridinyl)-1-piperazinecarboxylate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220547-54-6 CAPLUS L-Tyrosine, N-[(4R)-3-[(4-bromophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl)-, 4-(2-pyridinyl)-1-piperazinecarboxylate (ester) (9CI) (CA INDEX NAME)

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L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220547-56-8 CAPLUS
L-Tyrosine, N-[[(25)-3-[(4-fluorophenyl)sulfonyl]-2thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester, hexahydro-4-methyl-1H1,4-diazepine-1-carboxylate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220547-62-6 CAPLUS L-Phenylalanine, 3-chloro-N-[[(4R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-4-(2-pyridinyl)-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN L-Tyrosine, 3-chloro-N-[((4R)-5,5-dimethyl-3-{(1-methyl-1H-pyrazol-4-yl)sulfonyl)-.h-methylethyl ester,
dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220547-76-2 CAPLUS
L-Tyrosine, N-[[(4R)-3-[(4-bromophenyl)sulfonyl]-5,5-dimethyl-4thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester, 4-(2-pyridinyl)-1piperazinecarboxylate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220547-77-3 CAPLUS L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-[[4-(trifluoromethoxy)phenyl]sulfonyl]-4-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester, 4-(2-pyridinyl)-1-piperazinecarboxylate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220547-63-7 CAPLUS
L-Phenylalanine, 3-chloro-N-[{(4R)-3-[(4-fluorophenyl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl)carbonyl]-4-(2-pyridinyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220547-64-8 CAPLUS
L-Tyrosine, N-[((2S)-3-[(4-fluorophenyl)sulfonyl]-2thiazolidinyl[arbonyl]-. hexahydro-4-methyl-1H-1,4-diazepine-1carboxylate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 220547-65-9 CAPLUS

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220547-80-8 CAPLUS L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-{[4-(trifluoromethoxy)phenyl]sulfonyl]-4-thiazolidinyl]carbonyl]-, 4-(2-pyridinyl)-1-piperazinecarboxylate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220547-84-2 CAPLUS L-Tyrosine, N-[{(4R)-5,5-dimethyl-3-{(1-methyl-1H-imidazol-4-yl)sulfonyl}-4-thiazolidinyl]carbonyl]-, 4-{2-pyridinyl}-1-piperazinecarboxylate (ester) (9CI) (CA INDEX NAME)

## 10007342Page 44 11/15/2002

### L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220547-88-6 CAPLUS
L-Tyrosine, N-[[(4R)-5,5-dimethyl-3-[(1-methyl-1H-pyrazol-4-yl)sulfonyl]-4-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester, 4-(2-pyridinyl)-1-piperazinecarboxylate (ester) (9CI) (CA INDEX NAME)

#### Absolute stereochemistry.

220547-90-0 CAPLUS
L-Tyrosine, N-[(|4R)-5,5-dimethyl-3-[(l-methyl-1H-pyrazol-4-yl)sulfonyl]-4thiazolidinyl]carbonyl]-, 2-(phenylmethoxy)ethyl ester, dimethylcarbamate
(ester) (9CI) (CA INDEX NAME)

### L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220547-93-3 CAPLUS L-Tyrosine, N-[(1(4R)-3-[(3-chloro-1,5-dimethyl-1H-pyrazol-4-yl)sulfonyl]-5,5-dimethyl-4-thiazolidinyl]carbonyl]-, 4-[5-(trifluoromethyl)-2-pyridinyl]-1-piperazinecarboxylate (ester) (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

220551-45-1 CAPLUS
L-Tyrcsine, N-[[(4R)-3-[(4-fluorophenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-, dimethylcarbamate (ester) {9Cl} (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

220547-91-1 CAPLUS L-Phenylalanine, 3-chloro-N-[[(4R)-5,5-dimethyl-3-[(1-methyl-1H-pyrazol-4-yl)sulfonyl]-4-thiazolidinyl]carbonyl]-4-(2-pyridinyl)- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

220547-92-2 CAPLUS
L-Phenylalanine, 3-chloro-N-[[(4R)-5,5-dimethyl-3-[(1-methyl-1H-pyrazol-4-y)sulfonyl)-4-thiazolidinyl]carbonyl]-4-(2-pyridinyl)-, ethyl ester (9CI)
(CA INDEX NAME)

#### Absolute stereochemistry.

### L11 ANSWER 22 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

### REFERENCE COUNT:

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

### 10007342Page 45 11/15/2002

L11 ANSWER 23 OF 37 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:799992 CAPLUS
130:52724
1171LE: cell adhesion inhibitors: Durete, Philippe L.; Hagmann, William X.; Maccoss, Malcolm; Mills, Sander G.; Mumford, Richard A.; Van Riper, Gail M.; Schmidt, Jack A.; Kevin, Nancy J.

PATENT ASSIGNEE(S): Merck & Co., Inc., USA PCT Int. Appl., 129 pp.
CODEN: PIXXD2
DOCUMENT TYPE: LANGUAGE: Patent
LANGUAGE: Signish
FAMILY ACC. NUM. COUNT: 1 LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: ..., Ju, CF, CG, CI,
A1 19991230 AU 1998-80595 19980611
US 1997-48017P P 19970529
GB 1997-14314 A 19970707
US 1997-65525P P 19971125
GB 1998-666 A 19980114
WO 1998-US110940 W 19980529
WO 1998-US11623 A 19980611
MARPAT 130:52724

OTHER SOURCE(S):

Title compds. I [R1 = (un)substituted C1-10 alkyl, C2-10 alkenyl, C2-10 alkynyl, Cy, Cy-C1-10 alkyl, Cy-C2-10 alkenyl, Cy-C2-10 alkynyl, R2, R5 = independently (un)substituted H, C1-10 alkyl, C2-10 alkenyl, C2-10 alkynyl, aryl, aryl-C1-10 alkyl, heteroaryl-C1-10 alkyl, R3 =

L11 ANSWER 23 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued) thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

217450-98-1 CAPLUS 2.Naphthale nepropanoic acid, .alpha.-[[[(4R)-3-[(3,5-dichorophenyl)aulfonyl]-4-thiazolidinyl]carbonyl]amino]-, (.alpha.S)-(9C1) (CA NNOEN NAME)

Absolute stereochemistry.

217451-18-8 CAPLUS L-Tyrosine, N-[[(4R)-3-{(3,5-dichlorophenyl)sulfonyl}-4-thiazolidinyl]carbonyl}- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Examiner Anderson 703-605-1157

L11 ANSWER 23 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)
H, (un)substituted C1-10 alkyl, Cy, Cy-C1-10 alkyl; R4 = H, any group R1;
R3RM form mono- or bicyclic ring contg. 0-2 heteroatoms N, O, S; R4RS form
3-7 membered mono- or bicyclic ring contg. 0-2 heteroatoms N, O, S; R4RS form
3-7 membered mono- or bicyclic ring contg. 0-2 heteroatoms N, O, S; R10,
R11 = independently = any group R3; (un)substituted C2-10 alkenyl, C2-10
alkynyl; R10R11 may form 5-7 membered heterocyclic ring contg. 0-2 addn1.
heteroatoms N, O, S; R6-R8 = independently any group R10, OR10, NO2, halo,
S(O)mR10, SR10, SO3R10, NR10R11, COR10, CO2R10, OZR10, CN, CONR10R11, CF3,
OXO, NR10S(O)mR11, etc.; two Of R6-R8 may form 5-7 membered (un)satd.
monocyclic ring contg. 0-3 heteroatoms N, O, S; Cy = cycloalkyl,
heterocyclyl, aryl, heteroarpyl; A, Z = independently C, C-C; B = bond, C,
C-C, N, O, S, S(O)m; X = COZR10, P(O) (OR10) (OR11), P(O) (R10) (OR11),
S(O)mGR10, CONR10R11, 5-tetrazolyl; Y = CO, OZC, NR11CO, SO2, P(O) (OR4),
COCO; m = 1-2] = are antagonists of VIA-4 and/or alpha-4.beta-7, and are
useful for inhibition or prevention of cell adhesion and cell adhesion
mediated pathologies. These compds. may be formulated into pharmaceutical
compms. and are suitable for use in the treatment of asthma, allergies,
inflammation, multiple sclerosis, and other inflammatory and autoimmune
disorders. Thus, coupling of L-2-naphthylalaniae tetr-Pu estation of the component of the compo

Absolute stereochemistry.

217450-96-9 CAPLUS L-Norleucine, N-[[(4R)-3-[(3,4-dimethoxyphenyl)sulfonyl]-4-

L11 ANSWER 23 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 217451-19-9 CAPLUS
CN L-Tyrosine, N-[(14R)-3-[(3,5-dichlorophenyl) sulfonyl]-4thiazolidinyl]carbonyl]-3-iodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

217451-20-2 CAPLUS 2-Naphthalenepropanoic acid, .alpha.-[[[(4R)-3-[(3-fluorophenyl) sulfonyl]-4-thiazolidinyl]carbonyl]amino]-, (.alpha.S)- (9CI) (CA INDEX NAME)

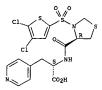
Absolute stereochemistry.

217451-22-4 CAPLUS
L-Phenylalanine, 4-fluoro-N-[[(4R)-3-[(3-fluorophenyl)sulfonyl]-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

217451-63-3 CAPLUS 21rus-190-3 CAPUS
4-Pyrtdinepropanoic acid, .alpha.-[[[(4R)-3-[(4,5-dichloro-2-thienyl)sulfonyl]-4-thiazolidinyl]carbonyl]amino]-, (.alpha.S)- (9CI) (CA INDEX NAME)

## 10007342Page 46 11/15/2002

L11 ANSWER 23 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)
Absolute stereochemistry.



RN 217451-68-8 CAPLUS
CN L-Phenylalanine, 4-fluoro-N-[[(4R)-3-[[3-(trifluoromethyl)phenyl]sulfonyl]4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 217451-72-4 CAPLUS
CN L-Tyrosine, N-{{(4R)-3-{(4,5-dichloro-2-thieny1)sulfony1}-4-thiazolidiny1}carbony1}- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 23 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 217452-11-4 CAPLUS
CN L-Tyrosine, N-[[(4R)-3-[(3-chlorophenyl)sulfonyl]-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 217452-17-0 CAPLUS
CN L-Tyrosine, N-[[(4R)-3-[(3-chlorophenyl)sulfonyl]-4thiazolidinyl]carbonyl]-, hydrogen sulfate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L11 ANSWER 23 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 217451-84-8 CAPLUS
CN L-Phenylalanine, N-[(4R)-3-[(3-chlorophenyl)sulfonyl]-4thiazolidinyl]carbonyl]-4-fluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 217451-87-1 CAPLUS
CN L-Tyrosine, N-[[(4R)-3-[(3,5-dichlorophenyl)sulfonyl]-4-thiazolidinyl]carbonyl]-3,5-diiodo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 217451-98-4 CAPLUS
CN L-Tyrosine, O-(1,1-dimethylethyl)-N-[[(4R)-3-[(3-fluorophenyl)sulfonyl]-4-thiazolidinyl]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 24 OF 37
ACCESSION NUMBER:
DOCUMENT NUMBER:
1171LE:
INVENTOR(5):

PATENT ASSIGNEE(S):
SOURCE:
POCUMENT TYPE:
LANGUAGE:
DOCUMENT TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:
FATENT INFORMATION:
11 1998:795039 CAPLUS
130:52733
Preparation of tyrosine derivatives as antiinflammatory agents
Head, Unhn Clifford; Archibald, Sarah Catherine;
Warrellow, Graham John
Celltech Therapeutics Limited, UK
PCT Int. Appl., 55 pp.
COODEN: PIXXD2
Patent
English
11 2002 ACS
1998:795039 CAPLUS
100:52733
Preparation of tyrosine derivatives as antiinflammatory agents
4 Head, Unhn Clifford; Archibald, Sarah Catherine;
Warrellow, Graham John
Celltech Therapeutics Limited, UK
PCT Int. Appl., 55 pp.
COODEN: PIXXD2
Patent InfoRMATION:

RO (Alk) mCR<sup>4</sup>R<sup>5</sup>NR<sup>6</sup>CO (N)

### 10007342Page 47 11/15/2002

- L11 ANSWER 24 OF 37 CAPLUS COPYRIGHT 2002 ACS
- ANSWER 24 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

  Tyrosine derivs. I [R = RIX1, (Hall)3CSO2; R1 = optionally substituted alkyl or arom. group; R2, R3 = independently H, halo, alkyl, alkoxy, OH, NO2; R4 = H, Me; R5 = (CH2)PCO2R8; R6= H, alkyl; R7 = optionally substituted alkyl group, aryl, aralkyl; R8 = H, alkyl; Alk = alkylene chain; Hall = F, Cl; X1 = bond, (CH2)n, CO, CH2CO, NHCO, CH2NHCO, SO2; X2 = CO, CO2, COWH, SO2; Y = S, S(O)q; m = O, 1; n = 1, 2; p = O, 1; q = 1, 2] and the salts, solvates and hydrates thereof, are described. The compds. are able to inhibit the binding of alpha.4 integrins to their ligands and are of use in the prophylaxis and treatment of immune or inflammatory disorders. Thus, coupling of N-acetyl-D-thioproline with L-tyrosine tert-Bu ester, followed by O-acylation with 2,6-dichlorobenzoyl chloride and acidid edesterification, gave desired tyrosine deriv. II. II and related thioprolyltyrosine derivs. were tested for inhibition of .alpha.4 integrin-dependent cell adhesion, and generally have ICSO values of .ltoreq.1 .mu.M in .alpha.4.beta.1 and .alpha.4.beta.7 assays, and ICSO values of .gtoreq. 50 .mu.M in assays of other integrins.

  217479-41-99

  Ris BAC (Biological activity or effector, except adverse); BSU (Biological
  - 217479-41-9P
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of tyrosine derivs. as antiinflammatory agents) 217479-41-9 CaPLUS
    L-Tyrosine, N-[[(4S)-3-(methylsulfonyl)-4-thiazolidinyl]carbonyl]-0-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 25 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)
RL: BAC (Biological activity or effector, except adverse): BSU (Biological study); nclassified): SPN (Synthetic preparation): THU (Therapeutic use):
BIOL (Biological study): PREF (Preparation): VSES (Uses)
(prepn. of benzenesulfonamides as elastase inhibitors)
RN 190252-84-7 CAPLUS
4-Thiazolidinecarboxylic acid, 3-[[4-[1-oxo-2-[4-(1-pyrrolidinyl]phenyl]butoxy]phenyl]sulfonyl]-, monohydrochloride, (4R)(9CI) (CA INDEX NAME)

Absolute stereochemistry.

• HCl

190252-88-1 CAPLUS
4-Thiazolidinecarboxylic acid, 3-{[3-methyl-4-[1-oxo-2-{4-(1-pyrrolidinyl)phenyl]butoxy]phenyl}sulfonyl}-, (4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 25 OF 37 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:568589 CAPLUS
DOCUMENT NUMBER: 129:175653
TITLE: Preparation of benzeness

Preparation of benzenesulfonamides as elastase inhibitors inhibitors
Nakas, Takahiko; Kato, Masashi; Fujita, Takehito;
Kawabata, Kazuhito; Ohno, Hiroyuki
Ono Pharmaceutical Co., Ltd., Japan
U.S., 150 pp.
CODEN: USKXAM INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: English 2

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO. DATE
US 5795890	Α	19980818	US 1996-718722 19960924
JP 09165365	A2	19970624	JP 1995-272058 19950927
JP 09278742	A2	19971028	JP 1996-271341 19960924
JP 2881688	B2	19990412	
JP 10251218	A2	19980922	JP 1998-111630 19960924
AU 9665837	A1	19970410	AU 1996-65837 19960925
AU 714025	B2	19991216	
ZA 9608069	Α	19970520	ZA 1996-8069 19960925
NO 9604045	A	19970401	NO 1996-4045 19960926
CA 2186665	AA	19970328	CA 1996-2186665 19960927
US 5998410	A	19991207	US 1998-31192 19980226
PRIORITY APPLN. INFO.:			JP 1995-272058 A 19950927
			JP 1996-45663 A 19960224
			JP 1996-271341 A3 19960924
			US 1996-718722 A3 19960924

OTHER SOURCE(S):

MARPAT 129:175653

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

ROCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

The title compds. [I, R1 = C1-8 alkyl, C1-8 alkoxy, OH, etc.; n = 0-5; D = carbocyclic ring; R2, R3 = H, C1-4 alkyl, C1-4 alkoxy, etc.; R2R3 = C1-4 alkylidene; CR2R3 = C3-7 cycloalkyl; R4 = C1-4 alkyl, C1-4 alkoxy; two of R4, attached to the benzene nucleus at ortho positions relative to each other, represent C3-5 alkylene; m = 0-4; R5, R6 = H, OH, C1-8 alkyl, etc.; NRSR6 = heterocyclyl) and their salts, which have an inhibitory effect on elastase and therefore are useful in the prevention and/or the treatment of emphysema, rheumatoid arthritis, atheroaclerosis, adult respiratory distress syndrome (ARDS), glomerular nephritis, myocardial infarction, idiopathic ulcerative colitis, and gingivitis, were prepd. and formulated. Thus, treatment of the ester II (prepn. described) with CF3CO2H in CH2C12/MeOPh afforded the title compd. III.RCl which showed IC50 of 0.055 ...

MB. 4 alkyl, and 1 alkyl, and

L11 ANSWER 25 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

• HC1

190252-91-6 CAPLUS
4-Thiazolidinecarboxylic acid, 3-[[3-methyl-4-[1-oxo-2-[4-[1-pyrcolidinyl]]+nenyl]butoxy]phenyl]sulfonyl]-, 1,1-dioxide, monohydrochloride, (4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

• HC1

190252-94-9 CAPLUS
4-Thiazolidinecarboxylic acid, 3-[[4-[2-(4-nitrophenyl)-1-oxobutoxy]phenyl]sulfonyl]-, (4R)- (9CI) (CA INDEX NAME)

## 10007342Page 48 11/15/2002

L11 ANSWER 25 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

211486-29-2 CAPLUS
4-Thiazolidinecarboxylic acid, 3-[[4-[1-oxo-2-[4-(1-pyrrolidinyl)phenyl]butoxy]phenyl]sulfonyl]-, 1-oxide, (4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry,

211486-40-7 CAPLUS
4-Thiazolidinecarboxylic acid, 3-[[4-[1-oxo-2-[4-(1-pyrrolidinyl)phenyl]butoxy]phenyl]sulfonyl]-, 1-oxide, (1R,4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 26 OF 37 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:163570 CAPLUS
DOCUMENT NUMBER: 128:204898
TITLE: Prepn. of 1,3-diheterocyclic metalloprotease
inhibitors

inhibitors
Pikul, Stanislaw; McDow-Dunham, Kelly Lynn; Almstead,
Neil Gregory; De, Biawanath; Natchus, Michael George;
Taïwo, Yetunde Olabis;
Procter & Gamble Company, USA
PCT Int. Appl., 49 pp.
CODEM: PIXMO2

PATENT ASSIGNEE(S): SOURCE:

Patent English

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PAT	ENT	NO		יוע	MD	DATE					~~ m r		_	DATE				
						DALL					CAII			DATE				
WO	9808	822												1997				
	w.	At.	ΔM	AT.	A11	1330	0303	DD	70	, דב הדר	97-0	2142	50	CN,	0822			
		DK.	FF.	Ec.	ET.	CP.	CF.	CV	ъч,	DK,	DI,	CA,	CH,	KG,	cu,	CZ,	DE,	
		LC,	IV,	10	10,	UD,	GE,	un,	no,	11,	15,	UP,	KE,	KG,	KΡ,	KR,	KZ,	
		DT.	DO,	DII	en,	er,	ьо,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	
		VN.	VII	7U	NH.	3E,	DV,	21,	KZ,	DL,	TJ,	TM,	TR,	TT,	UA,	UG,	υz,	
	RW-	GH.	KE,	LS.	MW,	en.	DI,	NG,	761	MD,	KU,	TJ,	TM	DK,				
		GB.	GR.	TF.	IT.	111	MC,	MIT.	DT.	AI,	DE,	Cn,	DE,	CG,	ES,	FI,	FR,	
		GN.	MI.	MD,	NF.	SN,	TD.	TC,	F1,	JE,	Dr,	ь,	Cr,	CG,	CI,	CM,	GA,	
AU	9739	858	,	,	1	1999	1319	10	A1	1 10	07_3	0050		19970	0000			
AU	7278	20		R:	5	2000	1221		A	, 15.	31-3	3030		1997	0022			
EP	9271	68		A.	ī	1999	3707		FE	100	07-0	3731	7	19970	2022			
EP	9271	68		B	i	2002	1106		131	13.	, - J	3131	′	1997	J022			
									GB	GR	7.77	T.T	7.11	NL,	CF	DT	7.00	P1
CN	1228	771	,	Ä	,	1999	915	,	CD,	190	27-14	3754	, LU,	19970	1022	μ,	ır,	F I
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JP	2000	51625	1	T2	2	2000	1205		JP	190	39-5	1171	`	19970 19970	1022			
US	6150	370		Ā		2000	1121		115	199	7-0	1841	í	10070	1026			
ZA	97071	593		A		19980	223		7.A	199	77-71	593		19970	1827			
NO	99008	38		A		19990	1428		NO	199	9-8	RA		19990	1222			
US	64654	174		B1	. :	2002	015		บร	200	10-69	2114		19990	1820			
US	64690	000		В1		20021	022		US	200	00-64	19826		20000	1829			
PRIORITY	APPI	JN. I	NFO.	:										19960				
														19970				

OTHER SOURCE(S): MARPAT 128:204898

Prepn. is reported for (I; RI = H; R2 = H, alkyl, acyl; Ar = COR3 (R3 = alkoxy, aryloxy, heteroaryloxy, etc.), SO2R4 (R4 = alkyl, heteroalkyl, aryl, etc.); X = O, S, SO, SO2, NR5 (R5 = H, alkyl, heteroalkyl, etc.); W

Examiner Anderson 703-605-1157

L11 ANSWER 25 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

L11 ANSWER 26 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

- H, alkyl, heterocycle, etc.; Y - H, OH, SR10 (R10 - H, alkyl, aryl, heteroaryl); Z - mil, spiro moiety or owo group substituted on heteroaryl); Z - mil, spiro moiety or owo group substituted on heterocyclic ring; n = 1-4) or an optical isomer, disatereomer or enantiomer thereof, or a pharmaceutically-acceptable salt, or biohydrolyzable amide, ester, or imide thereof which are useful as inhibitors of metalloproteases. Thus, condensation of C(RIZNH2)ZNe2 with p-MeO-CGH4SOZCI followed by cyclocondensation with HC(0)COZMe and amidation with NMH(OH) gives N-hydroxy-1,3-di-[(4-methoxyphenyl)sulfonyl]-5,5-dimethylhexahydropytimidine-2-carboxamide. Also disclosed are pharmaceutical compns. and methods of treating diseases, disorders and conditions characterized by metalloprotease activity using these compds. or the pharmaceutical compns. contg, them. Examples are given for treatment of rheumatoid arthritis, osteoarthritis, corneal abrasion and ulceration, chem. burns, asthma premetastatic tumor, periodontitis, etc. Typically, for a human adult weighing appraed. 70 kg., 5 - 3000 mg more preferably 5 - 1000 mg, and more preferably 10 - 100 mg, of I are administration and administration and administration and administration and administration and administration and selection and administration and pharmaceutical compns. PREP (Preparation); TRU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preps. of 1,3-diheterocyclic metalloprotease inhibitors and their pharmaceutical compns.)

RN 203915-75-7 CAPLUS

2-Thiazolidinecarboxamide, N-hydroxy-3-[(4-methoxyphenyl)sulfonyl]-2,5,5-trimethyl- (9CI) (CA INDEX NAME)

203915-76-8 CAPLUS
2-Thiazolidinecarboxamide, N-hydroxy-3-[(4-methoxyphenyl)sulfonyl]-5,5-dimethyl-(9CI) (CA INDEX NAME)

## 10007342Page 49 11/15/2002

#### L11 ANSWER 26 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

203915-77-9 CAPLUS 2-Thiazolidinecarboxamide, N-hydroxy-3-[(4-methoxyphenyl)sulfonyl]- (9CI) (CA INDEX NAME)

L11 ANSWER 27 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

L11 ANSWER 27 OF 37
ACCESSION NUMBER:
1997:784208 CAPLUS
DOCUMENT NUMBER:
1128:88717
11TLE:
1NVENTOR(S):
1NVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE:
DOCUMENT TYPE:
LANGUAGE:
DOCUMENT TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:
11997:784208 CAPLUS
1997:784208 CAPLUS
1997:784208 CAPLUS
1997:894208 CAPLUS
1997:784208 CAPLUS
1997:894208 CAPLUS
1997:784208 CAPLUS
1 DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE

JP 09316076 OTHER SOURCE(S): A2 19971209 MARPAT 128:88717 JP 1996-129933 19960524

The derivs. I (A = CH2, S; Rl, R2 = H, NH2; R3 = atylsulfonyl; if A = CH2, then R3 .noteq. SOZCSH4Me-p) or their salts are prepd. Also claimed are antiviral agents, esp., for treatment of AIDS, conty. I as active ingredients. The title compd. (S)-2,6-diamino-9-[N-(4 isopropylbenzenesulfonyl)-2-pyrrolidinylmethyl]purine (II) was prepd. by treatment of L-prolinol with 4-MeZHCSH3SOZc1 and condensation of the resulting N,0-bis(4-isopropylbenzenesulfonyl)-L-prolinol with 2,6-diaminopurine. Il showed an BCSO 10.0 .mm.g/kh against cell damage of MT-4 cells by HIV-1 (HTLV-IIIB) and CCSO was >100 .mm.g/mL. 201028-64-0p

201028-64-0P
RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation): RACT (Reactant or reagent)
(prepn. of [(thia)pyrrolidinylmethyl]purines as antiviral agents)
201028-64-0 CAPLUS
4-Thiazolidinemethanol, 3-[(4-methylphenyl)sulfonyl]-, (R) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 28 OF 37
ACCESSION NUMBER:
DOCUMENT NUMBER:
1997:456150 CAPLUS
127:162116
Arylsulfonamido-substituted hydroxamic acids
Marcherson, Lawrence J., Parker, David T.
Ciba-Geigy Corp., USA
U.S., 31 pp., Cont.-in-part of U.S. 5,552,419.
CODEN: USXCAM
DOCUMENT TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:
FAMILY ACC. NUM. COUNT:
7
ACCESSION NUMBER:
1997:456150 CAPLUS
147:162116
147:162116
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147:162116
147:162

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE IE, IT, LU, MC, NI, PT, SE, BF, B3, CF, CG, CG, CG, CM, GA, ML,

MR, ME, SN, TD, TG

AU 966129 Al 19961230 AU 1996-61249 19960604
US 5817822 A 19981006 US 1997-787730 19970124

ORITY APPLM. INFO:

US 1994-265296 A2 19940624
US 1995-475166 A 19950607

WC 1996-E72418 W 19960604

ER SOURCE(S):

MARPAT 127:162116

Arylaulfonamido-substituted hydroxamic acids HONHCOCRIRZN (CH2R) SO2Ar (Ar - carbocyclic or heterocyclic acyl r, R, R | + H, alkyl, acyl, etc.; R2 = H, alkyl, R and R1 or R1 and R2 may form a ring) or their pharmaceutically acceptable prodrug derivs. or salts were prepd. as antitumor agents. Thus, N-hydroxy-2(R)-[(4-methoxybenzenesulfonyl) (3-picolyl) amino]-3-methylbutanamide was prepd. from D-valine, 4-methoxybenzenesulfonyl chloride, 3-picolyl chloride hydrochloride, and O-tert-butylhydroxylamine hydrochloride.

MIL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of arylaulfonamido-substituted hydroxamic acids as matrix-degrading metalloproteinase inhibitors)

4-Thiazolidinecarboxylic acid, 3-[(4-methoxyphenyl)sulfonyl]-5,5-dimethyl-1, (S)- (G1) (CA INDEX NAME) PRIORITY APPLN. INFO.:

OTHER SOURCE(S):

### 10007342Page 50 11/15/2002

#### L11 ANSWER 28 OF 37 CAPLUS COPYRIGHT 2002 ACS

161313-76-4P

REL SPN (Synthetic preparation), THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of arylsulfonamido-substituted hydroxamic acids as matrix-degrading metalloproteinase inhibitors)
161313-76-4 CAPLUS

4-Thiazolidinecarboxamide, N-hydroxy-3-[(4-methoxyphenyl)sulfonyl]-5,5-dimethyl-, (S)- (9CI) (CA INDEX NAME)

#### Absolute stereochemistry.

L11 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)
190252-91-6P 190252-94-9P 190254-56-9P
190256-08-7P 190256-12-3P 190256-11-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological activity, unclassified); SFN (Synthetic preparation); TRU (Therapeutic use);
BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of sulfamoylphenyl alkanoates as elastase inhibitors)
RN 190252-84-7 CAPLUS
CN 4-Thiazolidinecarboxylic acid, 3-[{4-[1-oxo-2-[4-[1-pyr(rolidinyl)]phenyl]butoxylphenyl]sulfonyl]-, monohydrochloride, (4R)(9CI) (CA INDEX NAME)

### Absolute stereochemistry.

● HCl

190252-88-1 CAPLUS
4-Thiazolidinecarboxylic acid, 3-[[3-methyl-4-[1-oxo-2-[4-[1-pyrrolidinyl)phenyl]butoxy]phenyl]sulfonyl]-, (4R)- (9CI) (CA INDEX NAME)

190252-90-5 CAPLUS 4-Thiazolidinecarboxylic acid, 3-[[3-methyl-4-[1-oxo-2-[4-[1-pxrolidiny]phenyl]butoxy]phenyl]sulfonyl]-, 1-oxide, monohydrochloride, (15,4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Examiner Anderson 703-605-1157

L11 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:390578 CAPLUS
DOCUMENT NUMBER: 127:5005
TITLE: Preparation of sulfamov

127:5005
Preparation of sulfamoylphenyl alkanoates as elastase inhibitors
Nakae, Takahiko; Kato, Masashi; Fujita, Takehito; Kawabata, Kazuhito; Ohno, Hiroyuki
Oho, Pharmaceutical Co., Ltd., Japan
Eur. Pat. Appl., 270 pp.
CODEN: EPXXDW
Patent
English
2

INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE		APPLICATION NO	٠.	DATE			
EP 769498	A1	19970423		EP 1996-307048	}	19960927			
R: AT, BE	, CH, DE,	DK, ES,	FI, FR	, GB, GR, IE,	ΙT	. LI. LU.	NL.	PT.	SE
JP 09165365		19970624		JP 1995-272058			,	,	
JP 09278742	A2	19971028		JP 1996-271341		19960924			
JP 2881688		19990412							
JP 10251218	A2	19980922		JP 1998-111630	)	19960924			
AU 9665837		19970410		AU 1996-65837		19960925			
AU 714025	B2	19991216							
ZA 9608069	A	19970520		ZA 1996-8069		19960925			
NO 9604045	A	19970401		10 1996-4045		19960926			
CA 2186665	AA	19970328		A 1996-218666					
PRIORITY APPLN, INF						19950927			
						19960224			
						19960924			
OTHER SOURCE(S):	MAR	PAT 127:5		2.1011		15500524			

RICR2R3COZZSO2NRSR6 [I; Rl = {un}substituted carbocyclic or heterocyclic ring; R2,R3 = H, halo, alkyl, Ph, etc.; R2R3 = alkylidene or atoms to complete a carbocyclic ring; R5,R6 = H, OH, alkyl, etc.; NRSR6 = heterocyclyl; Z = {un}substituted 1,4-phenylene] were prepd. Thus, (S)-4-{tert-butoxycarbonyl-1-pyrrolidinylsulfonyl)-2-methylphenol was esterified by Z-{4-pyrrolidinophenyl)butanoic acid (prepn. each given) to give trile compd. II. Data for biol. activity of I were given. 190252-84-7P 190252-88-1P 190252-90-5P

L11 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

• HCl

190252-91-6 CAPLUS
4-Thiazolidinecarboxylic acid, 3-[[3-methyl-4-[1-oxo-2-[4-[1-pyrrolidinyl]phenyl]butoxy]phenyl]sulfonyl]-, 1,1-dioxide,
monohydrochloride, (4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

• HCl

190252-94-9 CAPLUS
4-Thiazolidinecarboxylic acid, 3-[[4-[2-(4-nitrophenyl)-1-oxobutoxy]phenyl]sulfonyl]-, (4R)- (9CI) (CA INDEX NAME)

### 10007342Page 51 11/15/2002

### L11 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

190254-56-9 CAPLUS
4-Thiazolidinecarboxylic acid, 3-[[3-methyl-4-[1-oxo-2-[4-(1-pyrrolidinyl)phenyl]butoxy]phenyl]sulfonyl]-, 1-oxide,
[[R-(1.alpha.,4.beta.]]-[partial]- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

190256-08-7 CAPLUS
4-Thiazolidinecarboxylic acid, 3-[[4-[1-oxo-2-[4-(1-pyrrolidinyl)phenyl]butoxy]phenyl]sulfonyl]-, (4R)- (9CI) (CA INDEX NAME)

190256-12-3 CAPLUS

L11 ANSWER 30 OF 37 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1996:620423 CAPLUS
126:8478 Synthesis, structural studies and antiretroviral evaluation of 3'-aza-4'-thia-2',3'-dideoxynucleosides (thiazolidine-nucleoside analogs)
AUTHOR(S): Faury, Philipper Camplo, Michel; Mourier, Nicolas; Trabaud, Carole; Nicolas, Hourier, Kraus, Jean-Louis Faculte Sciences Luminy, Unite INSERM, Marseille, 1328; Fr.
SOURCE: Bulletin de la Societe Chimique de France (1996), 133(6), 553-561 CODEN: BSCFAS; ISSN: 0037-8968
Elsevier

PUBLISHER: DOCUMENT TYPE: LANGUAGE: GI Elsevier Journal English

Starting with the concept that heterocyclic pseudo-ribose rings could confer potent antiviral activity to nucleoside analogs, we synthesized 3'-aza-4'-thia-2',3'-dideoxynucleosides, e.g. I. The synthesis of such analogs required the preps. of N-protected-1,3-thiazolidines adequately disubstituted in 2- and 5-positions. Introduction of nucleobases on these sugar-like thiazolidines was actived through coupling reactions using tin(IV) chloride as a catalyst. The N-protecting group (N-fluoreomy)methoxycarbonyl, N-acetyl and N-tosyl) of the thiazolidine ring is crucial for final deprotection of 3'-aza-4'-thia-2',3'-dideoxynucleosides. None of these compds. were found active on HIV-infected MT-4 cells. 18477-9-9 ps 18477-9-9-9 ps 18477-9-9-9 CAPLUS
study, unclassified), SPN (Synthetic preparation), BIOL (Biological study, unclassified), SPN (Synthetic preparation) ps 1847-9-9-9-6 CAPLUS
2-Thiazolidine nucleoside analogs)
18477-9-9-6 CAPLUS
2-Thiazolidinemethanol, 5-(4-amino-2-oxo-1(2H)-pyrimidinyl)-3-[(4-methylphenyl]sulfonyl]-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L11 ANSWER 29 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN 4-Thiazolidinecarboxylic acid, 3-[{3-methyl-4-[1-oxo-2-[4-(1-pyr-01dinyl)phenyl]butoxyl)phenyl]butoxyl-1-oxide,
[15-(1.alpha.,4.alpha.)]-[partial]- (9CI) (CA INDEX NAME)

#### Absolute stereochemistry.

190256-14-5 CAPLUS 4-Thiazolidinecarboxylic acid, 3-[[3-methyl-4-[1-oxo-2-[4-(1-pytrolidinyl)phenyl]butoxy]phenyl]sulfonyl]-, 1,1-dioxide, (4R)- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

L11 ANSWER 30 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

183477-91-0 CAPLUS
2-Thiacolidinemethanol, 5-(4-amino-2-oxo-1(2H)-pyrimidinyl)-3-{(4-methylphenyl)sulfonyl)-, cis- (9Cl) (CA INDEX NAME)

### Relative stereochemistry.

### 10007342Page 52 11/15/2002

L11 ANSWER 31 OF 37 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1996:563630 CAPLUS DOCUMENT NUMBER: 125:247383 Prenaration - C 125:247383
Preparation of arylsulfonamido-substituted hydroxamic acids as matrix-degrading metalloproteinase inhibitors MacPherson, Lawrence J., Parker, David T. Ciba-Geigy Corporation, USA U.S., 32 pp., Cont. -in-part of U. S. Ser. No. 265,296.
CODEN: USXXXM INVENTOR(S): PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: Patent LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: English

PATENT NO. DATE APPLICATION NO. DATE US 1994-333676 19941103 US 1993-1136 19930106 US 1993-45166 19950607 US 1995-475166 199506071 US 1997-787730 19970124 US 1993-1136 A2 19930106 NZ 1993-250517 A 19931220 US 1994-265296 A2 19940624 US 1994-333676 A2 19950607 US 1995-475166 A2 19950607 19960903 19951003 19960409 19970708 19970930 19981006 US 5552419 US 5455288 US 5506242 US 5646167 US 5672615 US 5817822 PRIORITY APPLN. INFO.:

OTHER SOURCE(S): US MARPAT 125:247383

HOHN 
$$R^1$$
 $R^2$ 
 $R^2$ 
 $R^2$ 
 $R^2$ 
 $R^2$ 
 $R^3$ 
 $R^$ 

The title compds. [I; Ar = carbocyclic or heterocyclic aryl; R = H, alkyl, biaryl, etc.; Rl = H, alkyl, polyhalo alkyl, etc.; R2 = H, alkyl] and

L11 ANSWER 31 OF 37 CAPLUS COPYRIGHT 2002 ACS

L11 ANSWER 31 of 37 CAPLUS COPYRIGHT 2002 ACS (Continued)
their salts, inhibitors of matrix-degrading metalloproteinase enzymes
(stromelysin, collagenase and macrophage metalloelastase), were prepd. and
formulated. Reaction of N-(4-methoxybenzenesulfonyl)-D-valine tert-Dau
ester with 3-picolyl chloride.HCl in the presence of K2CO3 in DMF followed
by deesterification of the ester (R)-II, reaction of the corresponding
acid.HCl with 0-tert-butylhydroxylamine.HCl in the presence of
1-hydroxybenzetriazole, 4-methylmorpholine and N-(dimethylaminopropyl)-N'ethylcarbodimide.HCl in CH2Cl2 and treatment of the intermediate (R)-III
with HCl in dichloroethane contg. EtOH afforded (R)-IHCl fAr = 4-MecOGH4;
R = 3-pyridyl; Rl = isopropyl; R2 = H] which showed Ki of 17 nM against
stromelysin.

II 161313-76-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of arylsulfonamido-substituted hydroxamic acids as

matrix-degrading metalloproteinase inhibitors) 161313-76-4 CAPLUS

4-Thiazolidinecarboxamide, N-hydroxy-3-[(4-methoxyphenyl)sulfonyl]-5,5-dimethyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ΙT

16:314-87-09
RL: RCT (Reactant); SPN (Synthetic preparation); PREF (Preparation); RACT (Reactant or reagent) (prepn. of arylsulfonamido-substituted hydroxamic acids as matrix-degrading metalloproteinase inhibitors) 16:314-87-0 CAPLUS 4-Thiazolidinecarboxylic acid, 3-[(4-methoxyphenyl)sulfonyl]-5,5-dimethyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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L11 ANSWER 32 OF 37 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1996:275067 CAPLUS DOCUMENT NUMBER: 125:34156
   DOCUMENT NUMBER:
TITLE:
                                                                             Act)-34166
Arylsulfonamido-substituted hydroxamic acids and
method of inhibiting metalloelastase activity,
inhibiting elastin degradation, or treating macrophage
metalloelastase dependent conditions in mammals
MacPherson, Lawrence J.; Parker, David T.; Jeng, Arco
 INVENTOR(S):
                                                                             Y.
Ciba-Geigy Corp., USA
U.S., 32 pp., Cont.-in-part of U.S. 5,455,258.
CODEN: USXXAM
 PATENT ASSIGNEE(S):
SOURCE:
  DOCUMENT TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                                             Patent
English
             KIND DATE
                                                                                                                                    APPLICATION NO. DATE
                                                                                    19960119
19980611
19970409
20001004
, DK, ES,
19970929
19990521
20001012
20010101
20010128
19951227
20010411
19970930
                                                                                                                       EP 1995-919600 19950b12

J GB, GR, IE, IT, LI, JU, NL, PT, SE
HU 1995-3592 19950612
JP 1995-502968 19950612
AT 1995-919600 19950612
ES 1995-919600 19950612
IL 1995-14171 19950615
ZA 1995-5126 19950623
TV 1995-84106624 19950628
US 1996-613303 19960311
FI 1996-6136 19961220
NO 1996-5156 19961220
NO 1996-5568 19961220
US 1997-787730 19970124
US 1993-1136 A2 19930106
US 1993-320517 A 19931220
US 1994-265296 A2 19940624
US 1994-265296 A2 19940624
US 1994-265296 A2 19950607
WO 1995-18464 V 19950612
                                                              B1
CH, I
A2
T2
E
T3
A1
A
B
               EP 766672
R: AT,
HU 76548
JP 11505502
AT 196762
ES 2151599
IL 114171
ZA 9505206
TW 429244
               TW 429244
US 5672615
                FI 9605156
                                                                                      19961220
19970217
                NO 9605568
                US 5817822
                                                                                     19981006
PRIORITY APPLN. INFO.:
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WO 1995-IB464 MARPAT 125:34156 OTHER SOURCE(S):

Examiner Anderson 703-605-1157

## 10007342Page 53 11/15/2002

#### L11 ANSWER 32 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

The invention relates to a method of inhibiting metalloclastase activity, of inhibiting the degrdn. of elastin, or of treating macrophage metalloclastase dependent conditions in mammals which comprises administering to a mammal in need thereof an effective macrophage metalloclastase inhibiting amt. of (MO) MMCOCRIRN(MELR) SOAR wherein: Ar is carbocyclic or heterocyclic aryl; R is, e.g., H, lower alkyl, carbocyclic aryl; R is, e.g., H, lower alkyl, carbocyclic aryl-lower alkyl; R2 - H or lower alkyl; R1 s, e.g., H, lower alkyl, carbocyclic aryl-lower alkyl; R2 - H or lower alkyl, or of a pharmaceutically acceptable prodrug deriv. thereof, or of a pharmaceutically acceptable salt thereof, or of pharmaceutical compns. comprising a said compd. Thus, e.g., treatment of D-valine with 4-methoxybenzenesulfonyl collowed by esterification with N,N-dimethylformanide di-t-Bu acetal afforded N-[4-methoxybenzenesulfonyl]-D-valine t-Bu ester; treatment of the latter with 3-picolyl chloride hydrochloride followed by HCl afforded 2(R)-[[4-methoxybenzenesulfonyl] (3-picolyl) aminol-3-methylbutannic acid hydrochloride; coupling with O-t-butylhydroxylamine hydrochloride followed by HCl afforded N-hydroxy-2(R)-[[4-methoxybenzenesulfonyl] (3-picolyl) aminol-3-methylbutannic acid by HCl afforded N-hydroxy-2(R)-[[4-methoxybenzenesulfonyl] (3-picolyl) aminol-3-methylbutannic acid by HCl afforded N-hydroxy-2(R)-[[4-methoxybenzenesulfonyl] (3-picolyl) aminol-3-methylbutannic acid by HCl afforded N-hydroxy-3(R)-[[4-methoxybenzenesulfonyl] (3-picolyl) aminol-3-methylbutannic acid hydroxylamic hydrochloride followed by HCl afforded N-hydroxy-3(R)-[[4-methoxybenzenesulfonyl] (3-picolyl) aminol-3-methylbutannic acid hydroxylamic hydroxhomic acid followed by HCl afforded N-hydroxy-3 (R)-[4-methoxybenzenesulfonyl] (3-picolyl) aminol-3-methylbutannic acid acid by HCl acid followed by HCl acid followed

Absolute stereochemistry.

L11 ANSWER 33 OF 37 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:31799 CAPLUS
DOCUMENT NUMBER: 122:314456
Arylsulfonamido-substituted hydroxamic acid antiinflammatory agents
MacPherson, Lawrence J.; Parker, David Thomas
Ciba-Geigy A.-G., Switz.
SOURCE: EWILD Appl., 43 pp.
COOLMENT TYPE: PARTON

DOCUMENT TYPE: Patent English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. DATE EP 606046
EP 606046
R: AT,
US 5455259
AT 159012
ES 2107648
AU 9332655
JP 06256293
JP 2951527
IL 108229
F1 9400012
CA 2112779
NO 9400038
NO 180583
NO 180583
NO 180583
HU 70536
HU 70536 APPLICATION NO. DATE

11 19940713 FP 1993-810896 19931221
11 19971008
DE, DK, ES, FR, GB, GR, IE, IT, II, LU, NL, PT, SE
19951003 US 1993-1136 19931026
1 19951001 AT 1993-810896 19931221
13 19971201 ES 1993-810896 19931221
14 19950504 AU 1993-52655 19931222
12 19971211
12 19940913 JP 1993-338108 19931228
12 19990920
14 19940910 IL 1993-108229 19931230
14 19940707 FI 1934-12 19940103
15 19940707 AL 1994-12 19940104
18940707 NO 1994-38 19940105
18970514 19940811 ZA 1994-48 19940105 .5540811 ZA 1994-48 32 19951030 HU 1994-39 US 1993-1136 MARPAT 122:314456 A2 19951030 PRIORITY APPLN. INFO.: OTHER SOURCE(S): G1

The title compds. OHNHCOC(R1) R2N(CH2R) SO2A [A = carbocyclic aryl, heterocyclic aryl, R = H, (un) substituted alkyl, aryl, hiaryl, etc., R1 = H, lower alkyl, aryl, biaryl, etc., R2 = H, lower alkyl, aryl, biaryl, etc., R2 = H, lower alkyl, R1R2 may form a heterocyclic substituent for cyclalkane substituent], which here effect as matrix metalloproteinase inhibitors (no data) useful in the arenest of arthritis (no data), are prepd. Thus, arylsulfonamido-substituted hydroxamic acid I, mp. 169-170.degree. (decompn.), was prepd. from N-(tert-butyloxy)-2(R)-[[4-methoxybenzenesulfonyl](3-picolyl)amino]-3-

Examiner Anderson 703-605-1157

L11 ANSWER 32 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

161314-87-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(arglaulfonamido-substituted hydroxamic acids and method of inhibiting metalloelastase activity, inhibiting elastin degrdn., or treating macrophage metalloelastase dependent conditions in mammals)
161314-87-0 CAPIUS
4-Thiazolidinecarboxylic acid, 3-[(4-methoxyphenyl)sulfonyl]-5,5-dimethyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 33 OF 37 CAPLUS COPYRIGHT 2002 ACS methylbutanamide and HCl.
IT 161314-87-0 (Continued)

161314-87-0

RE: RCT (Reactant); RACT (Reactant or reagent)
(prepn. and reaction of, in prepn. of arylsulfonamido-substituted hydroxamic acid antiinflammatory agents)
161314-87-0 CAPIUS
4-Thiazolidinecarboxylic acid, 3-[(4-methoxyphenyl)sulfonyl]-5,5-dimethyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry

161313-76-4P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of, as antiinflammatory agent) 161313-76-4 CAPLUS

dimethyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

161314-88-1

RL: RCT (Reactant): RACT (Reactant or reagent)
(reaction of, in prepn. of arylsulfonamido-substituted hydroxyamic acid
antiinflammatory agents)
161314-88-1 CAPLUS

4-Thiazolidinecarboxylic acid, 3-[(4-methoxyphenyl)sulfonyl]-, (S)- (9CI)
(CA INDEX NAME)

### 10007342Page 54 11/15/2002

L11 ANSWER 33 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.

OTHER SOURCE(S):

Thiazolidines I {R = H, acyl, sulfonyl; Rl = H, alkyl; R2 = H, alkyl, cycloalkyl aralkyl. Ph, substituted Ph; R3, R4 = H, alkyl, R5 = H, (un)substituted CO2H, COMHZ] were prepd. Thus, Me(CE)4(CHO was treated with D-penicillamine followed by benzoylation and reaction with isosorbide 5-nitrate to give the thiazolidine II. II lowered blood pressure in anesthetized rabbits and had a vasodilator ED50 of 0.0980 .mu.M on rat

L11 ANSWER 34 OF 37 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:426555 CAPLUS
100CUMENT NUMBER: 117:26555
Thiazolidine derivatives
Bron, Jan; Sterk, Geert Jan; Van der Werf, Jan Fetze;
Timmerman, Hendrick
Cedona Pharmaceuticals B. V., Neth.
PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DOCUMENT TYPE: EARGUAGE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 9204337 Al 19920319 WO 1991-EP1663 19910903

W: AU, CA, CS, DE, FT, HU, JP, KR, NL, NO, PL, SU, US

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE

AU 9184006 Al 19920330 AU 1991-91578 19900903

AU 656146 B2 19950127

EP 547104 Al 19930623 EP 1991-915783 19910903

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

JP 65500318 T2 19940113 JP 1991-51916 19910903

ZA 9107003 A 19930428 ZA 1991-7003 19910903

ZA 9107404 C 19950125

NO 9300790 A 19930304 NO 1993-790 19930304

US 5385922 A 19950114 NU 1993-983530 19930304

US 5385922 A 19950131 US 1993-983530 19930304

OTHER SOURCEF(S): WO 1991-EP1663 19910903

. 19930304 NO 1993-790 A 19950131 US 1993-983530 NL 1990-1955 WO 1991-EP1663 MARPAT 117:26555

KIND DATE

L11 ANSWER 34 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)
aorta in vitro.

IT 141534-18-19
RL: RCT (Reactant): SPN (Synthetic preparation): PREF (Preparation): RACT
(Reactant or reagent)
(prepn. and reaction of, with isosorbide 5-mononitrate)
RN 141534-18-1 CAPLUS
CN 4-Thisoldidinecarboxylic acid, 2-butyl-3-[(4-methylphenyl)sulfonyl]- (9CI)

141534-24-92

RE: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. and reaction of, with isosorbide nitrate) 141534-24-9 CAPLUS

141534-24-9 CAPLUS
4-Thiazolidinecarboxylic acid, 2-butyl-5,5-dimethyl-3-{(4-methylphenyl)sulfonyl}- (9CI) (CA INDEX NAME)

L11 ANSWER 35 OF 37 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1992:422613 CAPLUS

DOCUMENT NUMBER: 117:22613

AUTHOR(S): Endogenous alkaloids in man. 12. Determination of 1,3-thiazolidinecarboxylic acids in urine by reversed-phase HPLC after fluorescence labeling with dansyl chloride

Bringmann, G.; Feineis, D.; Hesselmann, Ch.
Inst. Org. Chem., Univ. Wuerzburg, Wuerzburg, D-8700, Germany

SOURCE: Analytical Letters (1992), 25(3), 497-512

CODEN: ANALBP; ISSN: 0003-2719

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A sensitive and reliable HPLC assay for the detn. of highly polar alkaloid-type heterocycles and their precursors, L-cysteine, cysteamine, and D(-)-penicillamine, was developed, based on the prechromatog, derivatization of secondary amines with dansyl chloride to form yellow fluorescent compds. Series of tests, monitoring disastereometic 5,5-dimethyl-thiazolidine-2(R,S)-4(S)-dicarboxylic acids after dansylation in matrix-free soln. and in urine, resp., using an external std. method, are presented. The detection limit for urine samples was detd. to be 2-3 mmol/mL.

IT 14198-35-5 141985-36-6 141985-37-7

RL: PRP (Properties)

141985-35-5 141985-36-6 141985-37-7
RL: PRP (Properties)
(spectra of)
141985-35-5 CAPLUS
2,4-Thiazolidinedicarboxylic acid, 3-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

141985-36-6 CAPLUS

2-Thiazolidinecarboxylic acid, 3-[[5-(dimethylamino)-l-naphthalenyl]sulfonyl]- (9CI) (CA INDEX NAME)

### 10007342Page 55 11/15/2002

L11 ANSWER 35 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

141985-37-7 CAPLUS
2,4-Thiazolidinedicarboxylic acid, 3-{[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-5,5-dimethyl-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L11 ANSWER 36 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)

L11 ANSWER 36 OF 37 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
DOCUMENT NUMBER:
1399:497844 CAPLUS
113:97844
Thiazolidine and thiazoline derivatives of
3-aryl-3-(trifluoromethyl)diazirines for the
preparation of fluorescent or 355-radiolabeled
photoaffinity probes
AUTHOR(S):

AUTHOR(S):

Kwistkowski, Stefan Crocker, Peter J.; Chavan, Ashok
J.; Imai, Nobuyuki; Haley, Boyd E.; Watt, David S.;
Ho, Ren Jye
Dep. Chem., Univ. Kentucky, Lexington, KY, 40506, USA
CODEN: TELEAY; ISSN: 0040-4039
JOURNAIL
LANGUAGE:
OTHER SOURCE(S):
GASREACT 113:97844

The condensation of cysteine with 3-(4-formylphenyl)- or 3-(4-cyanophenyl)-3-trifluoromethyldiazirine furnished thiazolidine and thiazolide derivs. I and II in good yield. These heterocycles provide convenient access to forskolin photoaffinity probes contg. a 35S radiolabel or a fluorescent dansyl group. 12886-90-89

12886-90-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and coupling of, with diacetylforskolin)
12886-90-8 CAPLUS
4-Thiazolidinecarboxylic acid, 3-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-2-[4-[3-(trifluoromethyl)-3H-diazirin-3-yl]phenyl]-, (2S-trans)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 37 OF 37 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
197:636699 CAPLUS
DOCUMENT NUMBER:
107:236699
Preparation of benzoylthiazolidinecarboxamides as immunostimulants and anticancer agents
NYENTOR(S):
Nagano, Mitsuor Sakai, Junichi; Kitamura, Koichi
Sankyo Co., Ltd., Japan
Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JDOCAF
Patent
Patent

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE JP 62155267 JP 06006578 19870710 19940126 JP 1985-296641 19851227

The title compds. [I; Rl = (un)substituted alkyl, cycloalkyl, aralkyl, aryl, heteroaryl, heterocyclyl, heterocyclylalkyl; X = CO, SO2; R2 = H, alkyl; R3 = (un)substituted Ph; n = 0-2], useful as immunostimulants and anticancer agents (no data), were prepn. A mixt. of 30 g (R)-thiazolidine-4-carboxylic acid and 31.7 g BzCl in 2 N aq. NaOH and MeZCO was stirred at 0-5.degree, for l h to give 96.99 benzoyl deriv. II, which (5.34 g) was condensed with 2.41 g PhCH2NH2 in CH2Cl2 in the presence of N-hydroxybenzotriazole and DCC to give 83.8% I (Rl = R3 = Ph, R2 = H, X = CO, n = 0).

R11390-42-72 in1420-41=9
RL: SFN (Synthetic preparation); PREP (Preparation) (prepn. of, as immunostimulant and neoplasm inhibitor)

111390-42-2 CAPLUS
4-Thiazolidinecarboxamide, N-[(4-methylphenyl)methyl]-3-[(phenylmethyl)aulfonyl]-, (R)- (9CI) (CA INDEX NAME)

## 10007342Page 56 11/15/2002

L11 ANSWER 37 OF 37 CAPLUS COPYRIGHT 2002 ACS (Continued)
RN 111420-41-8 CAPLUS
CN 4-Thiazolidinecarboxamide, N-[(4-methylphenyl)methyl]-3-(phenylsulfonyl)-,
(R)- (9CI) (CA INDEX NAME)

10007342Page 57 11/15/2002

=> fil req

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
163.98
517.57

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL
ENTRY SESSION
CA SUBSCRIBER PRICE

-22.92
-23.54

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STRUCTURE FILE UPDATES: 14 NOV 2002 HIGHEST RN 473658-67-2 DICTIONARY FILE UPDATES: 14 NOV 2002 HIGHEST RN 473658-67-2

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> Uploading 10007342.str

L12 STRUCTURE UPLOADED

=> d L12 HAS NO ANSWERS L12 STF

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s 112

SAMPLE SEARCH INITIATED 15:10:42 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 1414 TO ITERATE

70.7% PROCESSED 1000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.01

1 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*
BATCH \*\*COMPLETE\*\*

10007342Page 58 11/15/2002

PROJECTED ITERATIONS: 26025 TO 30535 PROJECTED ANSWERS: 1 TO 99

L13 1 SEA SSS SAM L12

=> s 112 full

FULL SEARCH INITIATED 15:10:48 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 27985 TO ITERATE

100.0% PROCESSED 27985 ITERATIONS

985 ITERATIONS 60 ANSWERS

SEARCH TIME: 00.00.05

L14 60 SEA SSS FUL L12

=> fil caplus

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
140.28
657.85

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE
ENTRY
SESSION
CA SUBSCRIBER PRICE

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-23.54

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FILE COVERS 1907 - 15 Nov 2002 VOL 137 ISS 21 FILE LAST UPDATED: 14 Nov 2002 (20021114/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> s 113

L15 1 L13

=> s 114

L16 17 L14

10007342Page 59 11/15/2002

=> d ibib abs hitstr 1-17

## 10007342Page 60 11/15/2002

L16 ANSWER 1 OF 17
ACCESSION NUMBER:
DOCUMENT NUMBER:
DOCUMENT NUMBER:
TITLE:
AUTHOR(S):

CORPORATE SOURCE:

OTHER SOURCE(S):

A total synthesis of kaitocephalin (I), a glutamate receptor antagonist, was accomplished employing a novel stereoselective C-C bond forming reaction of a nitrone (II) and a halide (III) with zinc in aq. solvent under sonication as a key step. The abs. configuration of kaitocephalin was confirmed to be 2R, 35, 48, 78, 95.
420107-69-39 420107-70-069
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(total synthesis of kaitocephalin via stereoselective reaction of a nitrone and a halide)

(total synthesis of kaitocephalin via stereoselective reaction of a nitrone and a halide) 420107-69-3 CAPLUS 1,2-Pytrolidinedicarboxylic acid, 5-[(25)-2-[[3,5-dichloro-4-(phenylmethoxy) benzoyl] amino] -3-oxo-3-(phenylmethoxy) propyl]-2-[(15,25)-1,3-dihydroxy-2-[[(phenylmethoxy) carbonyl] amino] propyl]-, bis(phenylmethyl) ester, (2R,58)- (9CI) (CA INDEX NAME)

L16 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

L16 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2002 ACS Absolute stereochemistry.

(Continued)

420107-70-6 CAPLUS
2,5-Pyrrolidinedipropanoic acid, .alpha.5-[[3,5-dichloro-4-(phenylmethoxy) benzoyl]amino]-.beta.2-hydroxy-1,2-bis[(phenylmethoxy) carbonyl]-.alpha.2-[(phenylmethoxy) carbonyl]-.alpha.2-((phenylmethoxy) carbonyl]amino]-.alpha.5-(phenylmethyl) ester, (.alpha.2R,.alpha.5S,.beta.2S,2R,5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

REFERENCE COUNT:

16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:63160 CAPLUS COCUMENT NUMBER: 137:6017 Synthesis of the proposed control of the pr

AUTHOR(S):

137:6017
Synthesis of the proposed structure and revision of stereochemistry of kaitocephalin
Okue, Masayuki; Kobayashi, Hiroyuki; Shin-ya, Kazuo; Hayakawa, Yoichi; Seto, Haruo; Watanabe, Hidenori; Kitahara, Takeshi
Graduate School of Agricultural and Life Sciences, Department of Applied Biological Chemistry, The University of Tokyo, Yayoi, Bunkyo-ku, Tokyo, 113-8657, Japan
Tetrahedron Letters (2002), 43(5), 857-860
CODEN: TELEAY; ISSN: 0040-4039
Elsevier Science Ltd.
Journal CORPORATE SOURCE:

SOURCE:

PUBLISHER: DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI Journal English CASREACT 137:6017

A stereoselective total synthesis of the proposed structure of kaitocephalin was accomplished starting from L-proline and 0- and L-serines. However, its HMMR spectral data and retention time on MPLC were not identical with those of authentic natural kaitocephalin. The revised stereochem. of natural kaitocephalin, (2R)-isomer I, was inferred from further expts. employing diastereomers and model compds.
433237-95-79 433238-69-89
RL: RCT (Reactant): SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis via a stereoselective coupling reaction of the proposed structure of kaitocephalin and revision of its stereochem.)
1,2-Pyrrolidinedicatboxylic acid. 5-[(2S)-2-[(3,5-dichloro-4-(phenylmethoxy)benzoyl) annio-[3-aco-3-(phenylmethoxy)penzoyl]-2-[(15,2R)-1,3-dihydroxy-2-[([(phenylmethoxy)cartonyl]minolpropyl]-)
bis(phenylmethyl) ester, (2R,SR)- (SCI) (CA INDEX NAME)

### 10007342Page 61 11/15/2002

L16 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2002 ACS

433238-69-8 CAPLUS
2,5 Pyrrolidinadipropanoic acid, .alpha.5-[[3,5-dichloro-4-(phenylmethoxy)denzoyl]amino]-.beta.2-hydroxy-1,2-bis[(phenylmethoxy)carbonyl]-.alpha.2-[[(phenylmethoxy)carbonyl]-.alpha.2-[[(phenylmethoxy)carbonyl]amino]-.alpha.5-(phenylmethyl) ester, (.alpha.25,.alpha.55,.beta.25,2R,5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER:
DOCUMENT NUMBER:
135:357785
TOTAL Synthesis of Kaltocephalin, the First Naturally
Occurring AMPA/KA Receptor Antagonist
Ma, Davel Yang, Jiade
CORFORATE SOURCE:
State Key Laboratory of Bioorganic and Natural
Products Chemistry Shanghai Institute of Organic
Chemistry, Chinese Academy of Sciences, Shanghai,
20032, Peop. Rep. China
JOURDAI of the American Chemical Society (2001),
123(39), 9706-9707
CODEN: JACSAT/ ISSN: 0002-7863
American Chemical Society
JOURNAI
LANGUAGE:
DOCUMENT TYPE:
LANGUAGE:
GIRCON CARREACT 135:357785

The first total synthesis of kaitocephalin (I) includes a highly diastereoselective aldol reaction and various functional group manipulations involving internal protection and group selectivity. 372187-24-19 372187-36-29 372187-36-39 RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation): RACT (Reactant or reagent) (total synthesis of kaitocephalin) 372187-24-1 CAPLUS 1,2-Pyrrolidinedicarboxylic acid, 2-[(1R,2R)-2-[[(1,1-dimethylethoxy)carbonyl]aminoj-3-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-1-hydroxypropyl]-5-(2-propenyl)-, 1-methyl 2-(phenylmethyl) ester, (2R,5R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L16 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

372187-25-2 CAPLUS
1,2-Pyrrolidinedicarboxylic acid, 2-[(15,2R)-2-[[(1,1-dimethylethoxy)carbonyl]mino]-3-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-1-hydroxypropyl]-5-(2propenyl)-, 1-methyl 2-(phenylmethyl) ester, (2R,5R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

372187-50-3 CAPLUS
1,2-Pyrrolidinedicarboxylic acid, 2-[(15,2R)-2-[[(1,1-dimethylethoxy)carbonyl]amino]-1,3-dihydroxypropyl]-5-(2-propenyl)-,1-methyl 2-(phenylmethyl) ester, (2R,5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L16 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

REFERENCE COUNT:

## 10007342Page 62 11/15/2002

L16 ANSWER 4 OF 17
ACCESSION NUMBER:
DOCUMENT NUMBER:
2000:34889 CAPLUS
132:93588
Preparation of amino acid and peptide derivatives as microbial efflux pump inhibitors.
Chamberland, Suzanner Ishida, Yoheir Lee, Ving J.;
Leger, Roger: Nakayama, Kiyoshir Ohta, Toshihacu Ohtsuka, Masamir Renau, Thomas W.; Watkins, William J.; Zhang, Zhijia J.
Microcide Pharmaceuticals, Inc., USA; Daiich Pharmaceutical Co., Ltd.
PCT Int. Appl., 387 pp.
COODEN: PIXXD2
Patent

DOCUMENT TYPE: Patent FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. WO 2000001714 US 6399629 AU 9952073 PRIORITY APPLN. INFO.: US 1998-108906 A 19980707 US 1998-87514P P 19980601 WO 1999-US14871 W 19990629

OTHER SOURCE(S): MARPAT 132:93658

'nZ

A method for treating a microbial infection comprises administration of title compds. [i; Q1 = (CH2)n1; Q2 = (CH2)n2; Q3 = (CH2)n3; n1 = 0, 1: n2 = 0-3; n3 = 0-2; n1n4+2n3 = 1-4; X = N, CR2a, CR2b; R2a = H, alky1; R2b = OH, F; Y = bond, S, O, NR23; R23 = H, alky1; R1, R2 = H, C(:NR)R7.

L16 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:504115 CAPLUS
DOCUMENT NUMBER: 127:217660
TITLE: 1.beta.-Methyl-2-(5-sul

127:217660

127:217660

127:217660

1.beta.-Methyl-2-(5-substituted pyrrolidin-3ylthio)carbapenems: 3. Synthesis and antibacterial
activity of Bo-2727 and its related compounds
Ohtake, Norikazu: Okamoto, Osamur Mitomo, Ryujir Kato,
Yoshiaki, Yamamoto, Katsumil Haga, Yujir Fukatsu,
Hicoshir Nakagawa, Susumu
Tsukuba Res. Inst., Banyu Pharmaceutical Co., Ltd.,
Tsukuba, 300-26, Japan
Journal of Antibiotics (1997), 50(7), 598-613
CODEN: JANTAJ; ISSN: 0021-8820
Japan Antibiotics Research Association
Journal Tournal Descriptions (1997), 100 (199 AUTHOR(S):

CORPORATE SOURCE:

SOURCE:

PUBLISHER: DOCUMENT TYPE: LANGUAGE: GI

The synthesis and biol. activity of (1R,55,65)-2-[(35,55)-5-substituted pyrrolidin-3-ylthio]-6-[(R)-1-hydroxyethyl]-1-methyl-1-carbapen-2-em-3-carboxylic acid in which hydroxy-substituted aminoethyl, aminopropyl, and aminobutyl groups were introduced as substitutents, are described. These derivs. showed potent antibacterial activity against Gram-ngo. and Gram-ngo, bacteria including P. aeruqinosa. Among then, lenapenem (1; BO-2727), carrying an (R)-1-hydroxy-3-(N-methylamino)propyl group, was selected as a development candidate.
194994-07-5F 194994-08-6F 194994-09-7P
194994-10-09 194994-11-1P 194994-13-3P
194994-35-3P
RLI FRP (Properties)! PUR (Purification of recovery). PCT (Pastarat). FRV

194994-33-99
RI: PRP (Properties); PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PRRE (Preparation); PACT (Reactant or reagent) (synthesis and antibacterial activity of Bo-2727 and its related leta.methyl-2-(5-substituted pyrrolidin-3-ylthio)carbapenems) 194994-07-5 CAPLUS

194994-07-5 CAPLUS
1-Pyrcolidinearboxylic acid, 4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2[1-hydroxy-2-[[[(4-nitrophenyl)methoxy]carbonyl]amino]ethyl]-,
1,1-dimethylethyl ester, [2S-[2.alpha.(S\*),4.beta.]]- (9CI) (CA INDEX

Absolute stereochemistry.

L16 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

C(:NR)NR'R'', etc., R, R', R'' = H, alkyl: Z = bond, (CHR4)nCONR4, Q, etc., R4 = H, alkyl: aralkyl: n = 0-3; A = bond, (CHR5)nX1(CHR5)nX1 < 0, S, bond, cycloalkylene, the tencoycloalkylene; R5 = H, alkyl: R3 = H, (substituted) aryl, tetrahydronaphthyl, indanyl, thienyl, furyl, pyridyl, quinolyl, cycloalkyl, etc., with provisos]. Thus, 1-(trans-4-aninomethyl-L-prolyl)-4-(3-chloro-2-methylphenyl)piperazine (soln. phase prepn. given) at 2.5 .mu.g/mL together with levofloxacin 0.25 .mu.g/mL gave 1001 inhibition of Pseudomonas aeruginosa PAM1001 growth.

I 23483-57-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of amino acid and peptide derivs. as microbial efflux pump inhibitors)

RN 254883-57-3 CAPLUS

CN 1-Pyrrolidinearchoxylic acid, 4-([1,1'-biphenyl]-3-yloxy)-2-[2-[[(1,1-dimethylethoxy)carbonyl]amino]-1-hydroxyethyl]-, 1,1-dimethylethyl ester, (25,4R)-(9C1) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L16 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

19494-08-6 CAPLUS
1-Pyrrolidinecarboxylic acid, 4-[{(1,1-dimethylethyl)dimethylsilyl]oxy}-2-[1-hydcoxy-2-[[(4-nitrophenyl)methoxy]carbonyl]maino]ethyl]-,
1,1-dimethylethyl ester, [2S-[2.alpha.(R\*),4.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

194994-09-7 CAPLUS
1-Pyrrolidinecarboxylic acid, 4-hydroxy-2-[1-hydroxy-2-[[[(4-nitrophenyl)methoxy]carbonyl]amino]ethyl]-, (4-nitrophenyl)methyl ester, [2S-[2.alpha.(R\*),4.beta.]]- (9C1) [CA INDEX NAME)

Absolute stereochemistry.

194994-10-0 CAPLUS
1-Pytrolidinecarboxylic acid, 4-hydroxy-2-[[-hydroxy-2-[[(4-nitrophenyl)methoxy]carbonyl]anino]ethyl]-, (4-nitrophenyl)methyl ester,
[25-[2.alpha.(S\*),4.beta.]]- (9CI) (CA INDEX NAME)

### 10007342Page 63 11/15/2002

L16 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

194994-11-1 CAPLUS

1-Pyriolidinecarboxylic acid, 4-(acerylthio)-2-[1-nydroxy-2-[[[(4-nitrophenyl)methoxylcarboxyljamino|ethyl]-, (4-nitrophenyl)methyl ester, [25-[2.alpha.(5-),4.alpha.]]- (901) (CA INNEX NAME)

Absolute stereochemistry.

194994-13-3 CAPLUS
1-Pytrolidinecarboxylic acid, 4-(acetylthio)-2-[1-hydroxy-2-[[[{4-nitrophenyl}methoxy]carbonyl]amino]ethyl]-, (4-nitrophenyl)methyl ester, [25-[2.alpha.(R\*),4.alpha.]]- (9CI) (CA INDEX NAME)

194994-35-9 CAPLUS

L16 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:223974 CAPLUS
COCUMENT NUMBER: 126:225242
TITLE: Regio- and Stereocontrolled Formation of Chiral Epoxy
Oxazolidines via Bromocarbamation of N-Boc Alkenyl
Oxazolidines via Prancois; Hamon, Louis; Venier,
Olivier
CORFORATE SOURCE: Laboratoire de Synthese Asymetrique (UBA CARS 408),
Universite P. et M. Curie, Paris, 75005, Fr.
JOURNAL OF COMMENT TYPE: JOURNAL OCEMISTRY (1997), 62(7), 2106-2112
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: JOURNAL
LANGUAGE: Emglish
AB Treatment of .alpha.-alkenyl N-Boc oxazolidines with N-bromosuccinimide
leads to epoxy oxazolidines via a bromocyclocarbamation reaction which is
completely stereoselective. Action of sodium azide on these epoxides,
followed by a few functional group manipulations, eventually affords
chiral .beta.-amin calcs., which are intermediates for the
enantioselective synthesis of bioactive products: the anti side chain of
taxol and a hydroxyethylamine isostere. Both the bromocarbamation
cyclization and the nucleophilic cleavage of the epoxides are totally
regioselective. ANI calcas. Suggest that this selectivity is controlled
by the pos. charge distribution at the electrophilic centers.

IT 189118-33-2P
RAL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

188118-23-2P
RE: RCT (Reactant): SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (regio- and stereocontrolled formation of chiral epoxyoxazolidines) 188118-23-2 CAPLUS
3-0xazolidinecarboxylic acid, 2-[2-[[(1,1-dimethylethoxy)carbonyl]amino]-1-hydroxy-3-phenylpropyl]-4-phenyl-, ethyl ester, [25-[2.alpha.(1R\*,2R\*),4.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

L16 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)
CN 1-Arabicyclo[3.2.0]hept-2-ene-2-carboxylic acid, 6-(1-hydroxyethyl)-3-[[5[1-hydroxy-2-[[(4-nitrophenyl)methoxy] carbonyl] mino]ethyl]-1-[[(4nitrophenyl)methoxyl carbonyl]-3-pyrrolidinyl]thio]-4-methyl-7-oxo-,
(4-nitrophenyl)methyl ester, [4R-[3[35\*,55\*(R\*)], 4.alpha.,5.beta.,6.beta.(
R\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L16 ANSWER 7 OF 17
ACCESSION NUMBER:
DOCUMENT NUMBER:
1996:697877 CAPLUS
126:59922
126:59922
Synthesis and renin inhibitory activity of novel angiotensinogen transition state analogs modified at the PZ-histidine position
AUTHOR(S):
CORPORATE SOURCE:
SOURCE:
SOURCE:
CORPORATE SOURCE:
SO

CODEN: E Elsevier Journal English

DOCUMENT TYPE: LANGUAGE:

With the aim of finding new renin inhibitors with improved bioavailability properties, two angiotensinogen transition state analogs [S-isomer [II], R-isomer], conts. a novel unnatural amino acid at the P2 position, namely the (2R, 3S)- and (2S, 3S)-2-amino-3-(1,3-dithiolan-2-yl)-3-hydroxypropanoic acid (ADMPA), have been synthesized and tested for human renin inhibitory activity and for chem. and enzymic stability. Only compd. II possessed a significant activity, which was lower than that of the corresponding histidyl deriv. KRI-1314, and combined with a low stability to the gut enzyme chymotrypsin.

histidyl deriv. KRI-1314, and combined with a low stability to the gut enzyme chymotrypsin. 18511-92-69 18511-98-2P 185112-01-09 185112-13-4P RLI RESILE-06-5P 185112-07-69 185112-13-4P RLI RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (synthesis and renin inhibitory activity of novel angiotensinogen transition state analogs modified at the P2-histidine position) 18511-92-6 CAPUS 2-Oxazolidinepropanoic acid, .alpha.-[[(1,1-dimethylethoxy)carbonyl]amino]-.beta.-hydroxy-4-methyl-3-[(4-methylphenyl)sulfonyl]-5-phenyl-, methyl ester, [25-[2.alpha.(.alpha.5\*,.beta.R\*),4.alpha.,5.alpha.]]- (9CI) (CA INDEX NAME)

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### L16 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 185111-98-2 CAPLUS
CN 2-Oxazolidinepropanoic acid, .alpha.-[[{1,1-dimethylethoxy)carbonyl]amino].beta.-hydroxy-4-methyl-3-[(4-methylphenyl)sulfonyl]-5-phenyl-, methyl
ester, [2S-[2.alpha.(.alpha.R\*,.beta.R\*),4.alpha.,5.alpha.]]- (9CI) (CA
INDEX NAME)

#### Absolute stereochemistry.

RN 185112-01-0 CAPLUS
CN 2-Oxazolidinepropanoic acid, .beta.-hydroxy-4-methyl-3-[(4-methyl)henyl)sulfonyl]-.alpha.-[(4-(4-morpholinyl)-2-(1-naphthalenylmethyl)-1,4-dioxobutyl]amino]-5-phenyl-, methyl ester, [ZS-[2.alpha.[.alpha.R\*(S\*),.beta.R\*],4.alpha.,5.alpha.]]- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

### L16 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 185112-07-6 CAPLUS
CN Cyclohexanebutanoic acid, .alpha.-hydroxy-.beta.-{[3-hydroxy-3-{4-methyl-3-[(4-methyl)henyl]-yulfonyl]-5-phenyl-2-oxazolidinyl}-2-[(4-(4-morpholinyl)-2-(1-naphthalenylmethyl)-1, 4-dioxobutyl]amino]-1-oxopropyl]amino]-, 1.1-dimethylethyl ester, [25-{2.alpha.[1(.alpha.5\*,.beta.R\*),2R\*(5\*),3R\*], 4.alpha.,5.alpha.]]- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

RN 185112-13-4 CAPLUS
CN Cyclohexanebutanoic acid, .alpha.-hydroxy-.beta.-[[3-hydroxy-3-[4-methyl-3-[4-methyl-bnenyl] sulfonyl]-5-phenyl-2-oxazolidinyl]-2-[(4-(4-morpholinyl)-2-(1-naphthalenylmethyl)-1,4-dioxobutyl]amino]-1-oxopropyl]amino]-, 1,1-dimethylethyl ester, [2S-[2.alpha.[1.alpha.5\*,.beta.R\*),25\*(5\*),3R\*], 4.alpha.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

#### L16 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

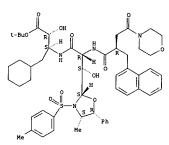
RN 185112-05-4 CAPLUS
CN 2-0xazolidinepropanoic acid, .beta.-hydroxy-4-methyl-3-[(4-methyl-hphenyl)sulfonyl]-.alpha.-[(4-(4-morpholinyl)-2-(1-naphthalenylmethyl)-1,4-dioxobutyl]amino]-5-phenyl-, methyl ester, [25-[2.alpha.[.alpha.5\*(5\*),.beta.R\*),4.alpha.,5.alpha.]]- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

RN 185112-06-5 CAPLUS
CN 2-0xazolidinepropanoic acid, .beta.-hydroxy-4-methyl-3-[(4-methyl)henyl)sulfonyl)-.alpha.-[(4-(4-morpholinyl)-2-[1-naphthalenylmethyl)-1,4-dioxobutyl]aminoj-5-phenyl-, [25-[2.alpha.[.alpha.5'(5'),.beta.R'],4.alpha.,5.alpha.]]- (SCI) (CA INDEX NAME)

### Absolute stereochemistry.

### L16 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)



### 10007342Page 65 11/15/2002

L16 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1996:196156 CAPLUS DOCUMENT NUMBER: 124:344068 TITUE: Synthesis and available.

Synthesis and evaluation of potential N.pi. and N.sigma. metal chelation sites with the beta-hydroxy-L-histidine subunit of bleomycin A2: functional characterization of imidazole N.pi. metal complexation

I

complexation

Boger, Dale L., Ramsey, Timothy M., Cai, Hui

Bep. of Chem., Scripps Res. Inst., La Jolla, CA,

92037, USA

PUBLISHER: DOCUMENT TYPE: LANGUAGE: GI

92037, USA Bioorganic & Medicinal Chemistry (1996), 4(2), 195-207 CODEN: BMECEP; ISSN: 0968-0896 Elsevier English

The synthesis and evaluation of fully functionalized deglycobleomycin A2 analogs I (R = 4-oxazoly1, 2-pyrroly1), incorporating an oxazole and a pyrrole in place of the .beta.-hydroxy-L-histidine imidazole, are detailed. The oxazole agent is only capable of N.pi. metal complexation through a form related to the N1-H imidazole of N.pi. metal complexation through a form related to the N1-H imidazole tautomer of bleomycin A2, while the pyrrole agent may potentially mimic the N.signa. metal complexation capabilities of the imidazole N3-H tautomer. Metal complexes (FeII, FeII) of I cleave duplex DNA in the presence of O2 (FeII) or the oxazole agent, which is incapable of N.signa. metal chelation, behaves analogous to, albeit slightly less effectively than, deglycobleomycin A2 resulting in the characteristic 5'-GC/5'-G7 sequence selective cleavage of duplex DNA directly confirming that imidazole/oxazole N.pi. metal chelation is sufficient for functional reactivity. Importantly, the effect substitution of the oxazole O1 for the histidine N1 further illustrates that this group does not require deprotonation upon metal complexation, oxygen activation, or the ensuing oxidn. reactions, that the functional bleomycin A2 tautomer is the imidazole N1-H tautomer, and that the imidazole N1-H functionality is not

L16 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

176752-63-9 CAPLUS

Bleomycinamide, 41-0-de[2-0-[3-0-(aminocarbonyl)-.alpha.-D-mannopyranosyl]-.alpha.-L-gulopyranosyl]-41-de-lH-imidazol-4-yl-N38-[(1,1-dimethylethoxy) carbonyl]-41-[1-(1,1-dimethylethoxy) carbonyl]-41-[1-(1,1-dimethylethoxy) carbonyl]-1H-pyrrol-2-yl]-N1-[3-(dimethylsulfonio)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

L16 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)
contributing to the polynucleotide recognition through H-bonding to the
phosphate backbone or nucleotide bases. In contrast, the pyrrole agent,
which is incapable to N.pi. metal chelation, but possesses the
capabilities of functioning as a N.sigma. metal donor was also found to
cleave duplex DNA, but does so in a nonsequence selective fashion with a
significantly reduced efficiency and a disinished double to single strand
cleavage ratio both only slightly above that of background iron itself.
These observations are analogous to those made with 1 (R = H) which lacks
the imidazole altogether and further support the observations that N.pi.
coordination, not N.sigma. coordination, of the imidazole is required for
the functional activity of bleomycin A2.

IT 176752-60-69 176732-61-79 176732-63-79
RL: RCT (Reactant); STN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(prepn. and evaluation of potential metal chelation sites of the
bicomycin nycroxynisticine subunit)
RN 176752-60-6 CAPLUS

NN 176752-60-6 CAPLUS

NH Pyrrole-2-propancic acid, .alpha.-[[[6-amino-2-[3-amino-]-[3-amino-2-[[(1,1-dimethylethoxy) carbonyl] amino]-1-([1,1-dimethylethoxy) carbonyl].beta.-hydroxy-, methyl ester, [.alpha.S-[.alpha.R\*[R\*(R\*)],.beta.S\*]](SCI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

176752-61-7 CAPLUS

1H-Pyrrole-2-propancic acid, .alpha.-[[[6-amino-2-[3-amino-1-[(3-amino-2-[(1,1-dimethylethoxy)carbonyl] amino]-3-oxopropyl] -5
methyl-4-pyrimidinyl]carbonyl]amino]-1-[(1,1-dimethylethoxy)carbonyl] .beta.-hydroxy-, [.alpha.S-[.alpha.R\*[R\*(R\*)],.beta.S\*]]- (9CI) (CA INDEX
NAME)

Absolute stereochemistry. Rotation (-).

L16 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

## 10007342Page 66 11/15/2002

L16 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1994:298360 CAPLUS DOCUMENT NUMBER: 120:298360 TITLE: Preparation of contact

120:298360 Preparation of carbapenem derivatives as medical

Preparation of carbapenem derivatives as medical bactericides
Nakagawa, Susumus Ootake, Kenichi; Nakano, Fumio; Yamada, Koji; Ushijima, Ryosuke; Murase, Satoshi; Fukatsu, Hiroshi
Banyu Pharma Co Ltd, Japan
Jpn. Kokai Tokkyo Koho, 51 pp.
CODEN: JXXXAF INVENTOR(S):

PATENT ASSIGNEE(S): SOURCE:

Patent

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

APPLICATION NO. DATE JP 05230063 OTHER SOURCE(S): GI A2 19930907 JP 1992-72633 19920221 MARPAT 120:298360

The title compds I [R1 = H, Me; R2 = H, neg. charge; X = NR3, R11R10N+; R3 = H, alkyl, alkylsulfonyl, etc.; R10, R11 = alkyl, alkylsulfonyl, etc.; Y = NR18, R19R20N+; R18 = H, alkyl, acetoimidoyl, etc.; R19, R20 = as defined above for R10, R11; W = H, alkyl, CO2R23, etc.; R23 = H, alkyl; Z = S, O, etc.; a, b, C, d = O = 3] were prepd. Carbapenem II [prepd. from p-nitrobenzyl (1R, S5, 65)-2-diphenoxyphosphoryloxy-6-[(1R)-1] hydroxyethyl]-1-methyl-1-carbapen-2-em-3-carboxylate] in vitro showed MIC values of 1.56 and 3.13 mu.g/mb. against Pseudomonas acruginosa MB 5002 and Pseudomonas acruginosa MB 5108, resp., vs. MIC values of 1.56 and 12.5 mu.g/mb. resp., for imipenem.

154577-55-OP 154577-60-3P
RL: RCT (Reactant): SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of, in prepn. of bactericides)
154577-59-O CAPLUS
1-Pyrrolidinecarboxylic acid, 2-[2-[(chloroacetyl)amino]-1-hydroxyethyl]-4-[((1,1-dimethylethyl)dimethylsilyl)oxy]-, 1,1-dimethylethyl ester (9CI)

L16 ANSWER 10 OF 17
ACCESSION NUMBER:
DOCUMENT NUMBER:
1994:134324 CAPLUS
120:134324
120:134324
Preparation of alkyl-substituted indoles in the benzene portion. Part 9. Synthesis of (1s3,8b5)-l-tert-butyloxycarbonyl-8-formyl-1,1a,2,8b-tertahydroazirino[2',3':3,4]pyrrolo[1,2'-a])ndole.
Model atudy for the enantiospecific synthesis of arirdinomitoseness
Utsunomlya, Iwao; Fuji, Masahiro; Sato, Tomohiro;
Natsumen, Mitsutaka
Res. Found. Itsuu Lab., Tokyo, 158, Japan
Chemical & Pharmaceutical Bulletin (1993), 41(5), 854-60
CODEN: CEBTAL; ISSN: 0009-2363

854-60 CODEN: CPBTAL; ISSN: 0009-2363 Journal English CASREACT 120:134324

DOCUMENT TYPE:

LANGUAGE: OTHER SOURCE(S): GI

Effective pathways for an enantiospecific synthesis of title azirino[2',3':3,4]pyrrolo[1,2-a]indole [1; R = Me3CO2C (Boc), R1 = CHO, R2 = R3 = H] (8) were investigated as a preliminary expt. aiming at chiral syntheses of aziridinomitosenes and I (R = H, R1 = CHOZCMH2, R2 = H0, R3 = CCH). An aldehyde derived from L-serine was condensed with 2-lithio-1-(phenylaulfonyl)indole to afford II and its dissereomer, whose stereochem. was unambiguously detd. by 1H-NMR studies of 1,3-dioxane derivs. as well as the x-ray crystallog, anal. of a dihydropyrcolo[1,2-a]indole deriv. III. The latter compd. and its disstereomer afforded the desired compd. 8 upon treatment with a mesylation reagent followed by potassium tert-butoxide in THF.
ISZ706-28-08 ISZ706-29-19
RL: SPN (Synthetic preparation) PREP (Preparation) (prepn. and transacetalization or phenylsulfonyl group cleavage of)
ISZ706-29-0 CAPLUS
Carbamic acid, (2-hydroxy-1-(hydroxymethyl)-2-(1-(phenylsulfonyl)-1H-indol-2-yl)ethyl]-, 1,1-dimethylethyl ester, [S-(R\*,R\*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Examiner Anderson 703-605-1157

ANSWER 9 OF 17 CAPLUS COPYRIGHT 2002 ACS (CA INDEX NAME) (Continued)

154577-60-3 CAPLUS
1-Pyrrolidinecarboxylic acid, 2-{2-{[(acetylthio)acetyl]amino}-1-hydroxyethyl)-4-{[(1,1-dimethylethyl)dimethylsilyl]oxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

L16 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

152706-29-1 CAPLUS

Carbamic acid, [2-hydroxy-1-(hydroxymethyl)-2-[1-(phenylsulfonyl)-1H-indol-2-yl]ethyl]-, 1,1-dimethylethyl ester, [R-(R\*,S\*)]- (9CI) (CA INDEX NAME)

## 10007342Page 67 11/15/2002

L16 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1993:559977 CAPLUS DOCUMENT NUMBER: 119:159977 TITLE: Aminoalkylpyrrolidinylt INVENTOR(S): Nakagawa, Susumu; Kato, 119:159977
Aminoalkylpyrrolidinylthiocarbapenem derivatives
Nakagawa, Susumu; Kato, Shinji; Murase, Satoshi;
Okamoto, Osamu; Mitomo, Ryuji; Yamamoto, Katsumi;
Yamada, Koji; Fukatsu, Hiroshi
Banyu Pharmaceutical Co., Ltd., Japan
Eur. Pat. Appl., 161 pp.
CODEN: EPXXDW PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
EP 545290	A1 19930609	EP 1992-120226	19921126
EP 545290	B1 20000823		
R: AT, BE,	CH, DE, DK, ES, FR, G	B. GR. IE. IT. LI	. LU. MC. NI. PT. SE
AU 9229632	A1 19930603	AU 1992-29632	19921125
AU 651505	B2 19940721		
WO 9311128	A1 19930610	WO 1992-JP1544	19921126
W: BG, BR,	CS, FI, HU, KR, NO, P	L. RO. RU	
HU 64345	A2 19931228	HU 1993-2170	19921126
AT 195736	E 20000915	AT 1992-120226	19921126
2A 9209222	A 19930524	ZA 1992-9222	19921127
CA 2083980	AA 19930528		
CN 1073176	A 19930616		
CN 1032061	B 19960619		,
JP 06087858	A2 19940329	JP 1992-341558	19921127
NO 9302685	A 19930727	NO 1993-2685	19930726
US 5550121	A 19960827		19940927
AU 9475894	A1 19950127	AU 1994-75894	19941018
AU 667786	B2 19960404		13341010
PRIORITY APPLN. INFO.	.: JP	1991-335888 A	19911127
		1992-215613 A	
		1992-JP1544 W	
		1992-982585 B1	
OTHER SOURCE(S):	MARPAT 119:159977		

L16 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

Title compds. I [R = H, Me; Rl = H, neg. charges R2 = amino, quaternary ammoniums A = (un) substituted alkylene] were prepd. Thus, carbapenem II was obtained by treating the protected carbapenem di-Ph phosphate with the protected thiol, sepg. the diastereomers, and deblocking. II had min. inhibitory concns. against Pseudomonas aeruginosa MB5002 of 0.78.mu.g/ml, cf. imipenem 1.56.mu.g/ml. 180812-44-27 pt 149813-12-7p 149813-12-7p 149813-13-0p 149813-13-0p 149813-13-0p 149813-14-0p 149813-14-0p 149813-16-1p 149813-14-9p 149813-45-0p 149813-16-1p 149813-14-9p 149813-19-0p 149813-19-1p 149813-14-0p 149813-19-1p 149813-14-0p 149813-14-0p 149813-19-1p 149813-19-1p 149813-19-1p 149813-19-1p 149813-1p 149

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L16 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

149812-49-7 CAPLUS
1-Azabicyclo[3.2.0]hept-2-ene-2-carboxylic acid, 6-(1-hydroxyethyl)-3-[[5[1-hydroxy-2-[nethyl][(4-nitrophenyl)methoxy]carbonyl]amino]ethyl]-1-[[(4nitrophenyl)methoxy]carbonyl]-3-pytrolidinyl]thio]-4-methyl-7-oxo-,
[4-nitrophenyl)methyl ester, [4R-[3[38\*,55\*(5\*)],4.alpha.,5.beta.,6.beta.(R\*)]]-([9CI) (CAINDEX NAME)

PAGE 1-A

L16 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

149813-12-7 CAPLUS
1-Pyrrolidinecarboxylic acid, 2-[2-[[(1,1-dimethylethoxy)carbonyl]amino]-1-hydroxyethyl]-4-[(1,1-dimethylethyl)dimethylsilyl]oxy]-, 1,1-dimethylethyl ester, [2S-[2.alpha.(R\*),4.beta.]]- (9CI) (CA INDEX NAMEY)

Absolute stereochemistry

149813-13-8 CAPLUS
1-Pytrolidinecarboxylic acid, 2-[2-[[[1,1-dimethylethoxy]carbonyl]amino]-1-hydroxytehyl]-4-[[1,1-dimethylethyl]dimethylsilyl]oxy]-, 1,1-dimethylethyl ester, [2S-[2.alpha.(5\*),4.beta.]]- (9CI) (CA INDEX vare)

Absolute stereochemistry.

149813-14-9 CAPLUS
1-Pyrrolidinecarboxylic acid, 4-hydroxy-2-[1-hydroxy-2-[[(2-propenyloxy)carbonyl]amino]ethyl]-, 2-propenyl ester, [2S-[2.alpha.(R\*),4.beta.]]- (9CI) (CA INDEX NAME)

### 10007342Page 68 11/15/2002

L16 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

149813-15-0 CAPLUS
1-Pyrrolidinecarboxylic acid, 4-hydroxy-2-[1-hydroxy-2-[[(2-propenyloxy)carbonyl]amino]ethyl]-, 2-propenyl ester, [25-[2.alpha.(5\*),4.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

149813-16-1 CAPLUS
1-Pyrrolidinecarboxylic acid, 4-(acetylthio)-2-[1-hydroxy-2-[[(2-propenyloxy)carbonyl]amino]ethyl]-, 2-propenyl ester, [25-[2.alpha.R\*),4.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

149813-17-2 CAPLUS 1-Fyrrolidinecarboxylic acid, 4-(acetylthio)-2-[1-hydroxy-2-[[(2-propenyloxy)carbonyl)amino]ethyl]-, 2-propenyl ester, [25-[2.alpha.(5\*),4.alpha.]]- (9CI) (CA INDEX NAME)

L16 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

Absolute stereochemistry.

149813-49-0 CAPLUS
1-Pyrrolidinecarboxylic acid, 4-(acetylthio)-2-[1-hydroxy-2-[methyl[[(4-nitrophenyl)methoxy]carbonyl]mmino]ethyl]-, (4-nitrophenyl)methyl ester, [2S-[2.alpha.(5\*),4.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

149882-32-6 CAPLUS
1-Azabicyclo[3.2.0]hept-2-ene-2-carboxylic acid, 6-(1-hydroxyethyl)-3-[[5-[1-hydroxy-2-[(2-propenyloxy)carbonyl]amino]ethyl]-1-[(2-propenyloxy)carbonyl]-3-pyrrolidinyl]thio]-4-methyl-7-oxo-, 2-propenyloxylcarbonyl]-3-pyrrolidinyl]thio]-4-methyl-7-oxo-, 2-propenyloxylcarbonyl, 5-5\*(S\*)], 4.alpha., 5.beta., 6.beta.(R\*)]]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{H}_2\text{C} = \text{CH} - \text{CH}_2 - \text{O} - \overset{\circ}{\text{C}} \\ \text{OH} \\ \text{CH} - \text{CH}_2 - \text{NH} - \text{C} - \text{O} - \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \text{Me} - \text{CH} \\ \text{N} \\ \text{O} \\ \text{O} \\ \text{C} - \text{O} - \text{CH}_2 - \text{CH} = \text{CH}_2 \\ \end{array}$$

Examiner Anderson 703-605-1157

L16 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

149813-45-6 CAPLUS
1-Fyrrolidinecarboxylic acid, 4-hydroxy-2-[1-hydroxy-2-[methyl[[(4-nitrophenyl)methoxy]carbonyl]amino]ethyl]-, (4-nitrophenyl)methyl ester,
[2S-[2.alpha.(R\*),4.beta.]]- (SCI) [CA INDEX NAME)

Absolute stereochemistry.

149813-46-7 CAPLUS
1-Pyrrolidinecarboxylic acid, 4-(acetylthio)-2-[1-hydroxy-2-[methyl][(4-nitrophenyl)methoxy]carboxyl]amino]ethyl]-, (4-nitrophenyl)methyl ester, [25-{2.alpha.(R\*),4.alpha.]}- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

149813-48-9 CAPLUS
1-Pyrrolidinecarboxylic acid, 4-hydroxy-2-[1-hydroxy-2-[methyl[[(4-nitrophenyl)methoxy]carbonyl]amino]ethyl]-, (4-nitrophenyl)methyl ester,
[2S-[2.alpha.(5\*),4.beta.]]- (9CI) (CA INDEX NAME)

L16 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

 $\begin{array}{llll} 149882-34-8 & CAPLUS \\ 1-Azabicyclo[3.2.0] & hept-2-ene-2-carboxylic acid, 6-(1-hydroxyethyl)-3-[5-[1-hydroxy-2-{nethyl[(4-nitrophenyl)methoxy] carbonyl] amino]ethyl]-1-[(4-nitrophenyl)methoxy] carbonyl]-3-pyrcolidinyl]thio]-4-methyl-7-oxo-, (4-nitrophenyl)methyl ester, [4R-[3[3S*,5S*(R*)],4.alpha.,5.beta.,6.beta.(R*)]]- (9CI) & (CA INDEX NAME) \\ \end{array}$ 

PAGE 1-A

### 10007342Page 69 11/15/2002

L16 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1992:21037 CAPLUS DOCUMENT NUMBER: 116:21037 TITLE: Prenarchic Communication of the communic Il6:21037
Preparation of tricyclic [6.5.5]/[6.6.5]-fused oxacolidinone antibacterial agents
Brickner, Steven Joseph
Upjohn Co., USA
PCT Int. Appl., 61 pp.
CODEN: PIXXO2
Patent
English INVENTOR(S): PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: English 1

KIND DATE APPLICATION NO. DATE 19920513 OTHER SOURCE(S):

116 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

IТ 135829-13-98 135829-13-99
RE: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. and redn. of, in prepn. of tricyclic antibacterial) 135829-13-9 CAPUS
HN-Indole-1-carboxylic acid, 2-[2-(acetylamino)-1-hydroxyethyl]-2,3-dihydro-, phenylmethyl ester, (R\*,S\*)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L16 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

Title compds. for ex: I [R1 = H, (chloro)alkyl, cycloalkyl, alkenyl, (substituted) Ph, heterocyclyl, alkony, (substituted) amino, HOCH2, alkoxymethyl, alkylcarbonylmethyl; R2, R4 = H, HO, halo, alkylcarbonyloxy, PhOCO2; R3 = H, halo, MeO, ELO, (substituted) alkylcarbonyl, PhCH2CCH2CO, N3CH2CO, HON:CMe, MeSO2, PhSO2, MeSO, PhSO, etc.; R5 = CO, (OH,H), (OH, Me), (H, alkyl, halo, double bond with R6), etc: R6 = H, null] and salts thereof, useful as antibacterial agents (no data), are prepd. AlCl3 in CH2Cl2 was cooled and ClCH2COCl was added dropwise followed by (L5,985)-N-[(9,98-dihydro-3-oxo-1H,3H-oxazolo[3,4-a]indol-1-yl]methyl]acetamide (prepn. starting from Et indole-2-carboxylate given) in CH2Cl2, to give after work-up the (1S,985)-acetamide II.
135829-09-3P

135829-09-3P
RE: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. and acetylation of, in prepn. of tricyclic antibacterial) 135829-09-3 CAPIUS
HF-Indole-1-carboxylic acid, 2-[2-(acetylamino)-1-hydroxyethyl]-2,3-dihydro-, phenylmethyl ester, (R\*,R\*)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

135854-81-8P

135834-01-09
REI: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. and cyclization of, in prepn. of antibacterial) 135854-01-0 (RAPIUS 11-Indole-1-carbonyl chloride, 2-{2-(acetylamino)-1-hydroxyethyl}-2,3-dihydro-, (R\*,S\*)- (9CI) (CA INDEX NAME)

L16 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1991:247788 CAPLUS

TITLE: 114:247788

INVENTOR(S): Peptide derivatives preparation as retroviral protease inhibitors

Kempf, Dale J.; Plattner, Jacob J.; Norbeck, Daniel W.; Boyd, Steven A.; Baker, William R.; Erickson, John W.; Fung, Anthony K. L.; Crowley, Steven R.

Abbott Laboratories, USA PCT Int. Appl., 222 pp.

COUDEN TYPE: Patent LANGUAGE: PIXXD2

PATENT INFORMATION: 1

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 8910752 A1 19891116 WO 1989-US2055 19890512

W: AU, DX, JP, XR, US
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE

EP 342541 A2 19891123 EP 1989-108590 19890512

R: ES, GR R: ES, GR AU 8935660 PRIORITY APPLN. INFO.: OTHER SOURCE(S):

EF 342541 A3 19911106
R: ES, GR
AU 8935660 A1 1991129 AU 1989-35660 19890512
FF 415991 A1 19910313 FP 1999-905856 19890512
R: AT, EE, CH, DE, FR, GB, IT, LI, LU, NN, SE
JP 03504247 T2 19910919 JP 1999-506033 19890512
ORITY APPLN. INFO.:
US 1988-194678 19880513
WO 1989-US205S 19890512
ER SOURCE(S): MARPAT 114:247788
Peptide derivs. are prepd. as retroviral protease inhibitors. Synthetic processess involved carbodifimide coupling, or coupling in combination with deprotection, and reaction with mixed anhydrides. Thus,
N=methyl-1-cyclohexenecarboxamide was treated with Bull in THF, treated with ClTi(DFr-iso)3, and then Boc-phenylalaninal to give
N=methyl-6-(2-(tett-butoxycarboxyl)amino-1-hydroxy-3-phenyl)propyl-1-cyclohexenecarboxamide-HCI (I). I was coupled with Boc-Leu-Asn in the presence of 180-BuO2Ccl to give the amide.
129776-79-0P
RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation): RACT (Reactant or reagent)
(prepn. and deprotection and coupling of, with leucyl asparagine deriv.)

Examiner Anderson 703-605-1157

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L16 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

L16 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

128227-44-19

128227-44-19
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) [Income and reaction of, with propanedithiol or ethanedithiol) 128227-44-1 CAPLUS
Carbamic acid, [2-hydroxy-1-[(methoxyamino)carbonyl]-2-[4-methyl-3-[(4-methyl)]-ylfonyl]-5-phenyl-2-oxazolidinyl]ethyl]-, phenylmethyl ester, [2R-[2.alpha. (15\*, 2R\*),4.alpha.,5.alpha.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L16 ANSWER 14 OF 17
ACCESSION NUMBER:
DOCUMENT NUMBER:
11990:458742
Asymmetric synthesis of 3,4-cis-substituted
.beta.-lactams via chiral norephedrine-derived
oxazolidines
Cardani, S., Gennari, C., Scolastico, C., Villa, R.
DOCUMENT TYPE:
LANGUAGE:
DOCUMENT TYPE:
LANGUAGE:
OTHER SOURCE(S):
G1
CASREACT 113:58742

A diastereo- and enantioselective approach to functionalized 3,4-cis-,beta.-lactams I (R = Me, Rl = CH2OH, R2 = H; R = PhCH2O2CNH, Rl = 1,3-dithiol-2-yl, 1,3-dithian-2-yl, R2 = OMe) was from chiral noresphedine-derived obxazolidines is described. The key steps in the synthesis of I (R = Me, Rl = CH2OH, R2 = H) are the oxidin. of aldehyde II and the LicCMP2 addn. to epoxy acid III, both steps proceeding regio- and stereoselectively (998) and in high yield. Std. synthetic methods and the Miller hydroxamate procedure for N-C cyclization completed the synthesis of I (R = Me, Rl = CH2OH, R2 = H) (.gtoreq.981 enantiometic excess). In the synthesis of I (R = PhCH2O2CNH, Rl = 1,3-dithiol-2-yl, R. 3-dithina-2-yl, R2 = OMe) the key step is the sq. NH3 opening of III which proceeds regio- and stereoselectively (>981). The Miller-type cyclization under Mitsunobu conditions gave I in only 351 yield.

RL: RCT (Reactant); RACT (Reactant) or reagent)

L16 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1989:595413 CAPLUS
DOCUMENT NUMBER: 111:195413
TITLE: Preparation of remin inhibitory peptides containing
1-amino-2-hydroxy-2-heterocyclyl moiety
Gammill, Ronald B. Sawyer, Tomi K.
UDjohn Co., USA
POT Int. Appl., 74 pp.
COUEN: FIXXD2
DOCUMENT TYPE: Patent

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

MT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO.

WO 8903842 A1 19890505 WO 1988-US3274
W: AU, DK, FI, JP, KR, NO, US
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE
AU 8825415 A1 19890523 AU 1988-25415
AU 619222 B2 19920123
EP 395664 A1 19901107
R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE
JP 03500772 T2 19910221 JP 1988-508337
DK 9000977 A 19900419 DK 1990-377
US 5132400 A 19920721 US 1990-1771
US 5132400 A 19920721 US 1990-1771
US 5132400 A 19920721 US 1990-1771
R SOURCE(S): MARPAT 111:195413
For diagram(s), see printed CA 1ssue. APPLICATION NO. DATE 19880926 19880926 19880926 19880926 19900419 19900420 19900420 19871021 PRIORITY APPLN. INFO.:

OTHER SOURCE(S):

WO 1988-US3274 19880926

ER SOURCE(S): MARPAT 111:195413
For diagram(s), see printed CA Issue.
The title compds., contg. the moiety Q [\* indicates asym. C; R90, R91 = H, alkyl, aralkyl, heterocyclylalkyl, cycloalkylalkyl, adamantyl; CR100R101 = heterocyclylx R102 = H, alkyl, aralkyl, heterocyclylalkyl, cycloalkylalkyl, etc.; n = 0, 1-5 integer], useful as renin inhibitors (no data), are prepared. Peptide I [R - CH20Ph, R1 = COZCH2Ph], prepd. in many steps from protected phenylalaninal II, pyrrolidineformamidine III, BOC-His(,pi.BOM)-OH (BOC = Me3COZC, BOM = CH20CH2Ph), and Ac-Tcp(Nin-CH0)Pro-Phe-OH, was deportected with HF-anisole to give I (R = R1 = H).
R1 = H).
R1 = H).
R1 = K1 (Reactant): SN (Synthetic preparation); PREP (Preparation); RACT (Reactant): SN (Synthetic preparation); PREP (Preparation): PREP (PREPARATION: PREP (PREPARATION

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L16 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 123337-19-9 CAPLUS
CN 1-Pyrrolidinecarboxylic acid, 2-{3-cyclohexyl-2-[{2-[[(1,1-dimethylethoxy) carbonyl] amino]-1-roxo-3-[1-{(phenylmethoxy) methyl]-1H-imidzacid-4-yllpropyljamino] 1 hydroxypropyl]-, phenylmethyl ester,
[ZR-[ZR\*[15\*,25\*(5\*)]]]- (9C1) (CA INDEX NAME)

Absolute stereochemistry.

RN 123337-20-2 CAPLUS
CN L-Histidinamide, N-acetyl-1-formyl-L-tryptophyl-L-prolyl-L-phenylalanyl-N[1-(cyclohexylmethyl)-2-hydroxy-2-[1-{(phenylmethoxy) carbonyl]-2pytrolidinyl|ethyl|1-1-{(phenylmethoxy) methyl}-, {2R-{2R\*(15\*,2S\*)}}- (9CI)
(CA INDEX NAME)

L16 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

RN 123409-19-8 CAPLUS
CN 1-Pyrrolidinecarboxylic acid, 2-[3-cyclohexyl-2-[[2-[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxo-3-[1-[(phenylmethoxy)methyl]-lh-imidacol-4-yl]propyl]amino]-1-hydroxypropyl]-, phenylmethyl ester, [2S-[2R\*[1s\*,2R\*(R\*)]]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 123409-20-1 CAPLUS
CN L-Histidinamide, N-acetyl-1-formyl-L-tryptophyl-L-prolyl-L-phenylalanyl-N[1-(cyclohexylaethyl)-2-hydroxy-2-[1-[(phenylmethoxy)carbonyl]-2pyrcolidinyl]ethyl]-1-[(phenylmethoxy)methyl]-, {2S-[2R\*(lR\*,2S\*)]}- (9CI)
(CA INDEX NAME)

L16 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

PAGE 1-A

PAGE 2-A

N 123409-17-6 CAPLUS

1-Pyrrolidinecarboxylic acid, 2-[3-cyclohexyl-2-[[(1,1-dimethyl)ethoxy)carboxyl]-, phenylmethyl ester, [2S-[2R\*(15\*,2R\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L16 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

PAGE 1-A

PAGE 2-A

### 10007342Page 72 11/15/2002

L16 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1989:154837 CAPLUS DOCUMENT NUMBER: 110:154837 TITLE: ARVINGAL

110:154837 Asymmetric synthesis of functionalized .alpha.-amino-.beta.-hydroxy acids via chiral norephedrine-derived oxazolidines Cardani, Silvia; Bernardi, Anna; Colombo, Lino; Gennari, Cesare; Scolastico, Carlo; Venturini, Isabella AUTHOR(S): CORPORATE SOURCE: Dip. Chim. Org. Ind., Univ. Milano, Milan, 20133,

Tetrahedron (1988), 44(17), 5563-72 CODEN: TETRAB; ISSN: 0040-4020

DOCUMENT TYPE: Journal

LANGUAGE: OTHER SOURCE(S): English CASREACT 110:154837

Both anti and syn enantiomerically pure functionalized .alpha.-amino-.beta.-hydroxy acids and derivs. were synthesized starting from norepinephrine-derived oxazolidine I (Ts = tosyl). The key steps of the synthesis were the nucleophilic epoxidn. of I and the nucleophilic opening of epoxy acid II with ammonia, both reactions proved regio- and disatereospecific. High yield prepn. of the target anti aldehyde III was accomplished using std. procedures. The complementary syn aldehyde IV was also prepd. The aldehyde function of III and IV provides a useful handle for manipulation to more complex structures, allowing potential access to a range of optically pure .alpha.-amino-.beta.-hydroxy acids. The formal total synthesis of the monocyclic beta.-lactam antibiotic "carumonam" was accomplished using the present methodol.

119588-71-5P
RL: RCT (Reactant): SPN (Synthetic preparation): PREP (Preparation): RACT (Reactant or reagent) (prepn. and esterification of, with diazoethane)

119588-71-5 CAPIUS
2-Oxazolidinepropanoic acid, .beta.-hydroxy-4-methyl-3-[(4-methylphenyl)sulfonyl]-5-phenyl-.alpha.-[[(phenylmethoxy)carbonyl]amino]-, [25-[2.alpha.(.alpha.5\*,.beta.R\*),4.alpha.,5.alpha.]]- (9CI) (CA INDEX

L16 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

L16 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2002 ACS (Continued)

119588-72-6P 119618-54-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of, with ethanedithiol)
119588-72-6 CAPLUS
2-Oxazolidinepropanoic acid, .beta.-hydroxy-4-methyl-3-[(4-methylphenyl]sulfonyl]-5-phenyl-.alpha.-[[(phenylmethoxy)carbonyl]amino]-,ethyl ester, [25-[2.alpha.(.alpha.5\*,.beta.R\*),4.alpha.,5.alpha.]]- (9CI)
(CA INDEX NAME)

119618-54-1 CAPLUS
2-Oxazolidinepropanoic acid, .beta.-hydroxy-4-methyl-3-[(4-methylphenyl)sulfonyl)-5-phenyl-.alpha.-[((phenylmethoxy)carbonyl]amino]-,ethyl ester, [25-[2.alpha.(.alpha.R\*,.beta.R\*),4.alpha.,5.alpha.]]- (9CI) (CA INDEX NAME)

L16 ANSWER 17 OF 17
ACCESSION NUMBER:
DOCUMENT NUMBER:
1974:413723 CAPLUS
81:13723
Di- and polyamino sugars. XX. Synthesis of
2,3,4,6-tetraamino-2,3,4,6-tetradeoxy-D-glucose
Meyer zu Reckendorf, Wolfgang, Wassiliadou-Micheli,
Niobe
Lorror Source:
SOURCE:
CORPORATE SOURCE:
SOURCE:
COED: CHEAM
DOCUMENT TYPE:
COED: CHEAM
JOURNI 2002 ACS
ACTUAL
1372 CAPLUS
81:13723
Di- and polyamino sugars. XX. Synthesis of
2,3,4,6-tetraamino-2,3,4,6-tetradeoxy-D-glucose
Neyer zu Reckendorf, Wolfgang, Wassiliadou-Micheli,
Niobe
CORPORATE SOURCE:
COED: CHEAM
JOURNI 1796:
CODEN: CHEAM
JOURNI 3002 ACS

CODEN: Chem. Ber. (1974), 107(4), 1188-94

CODEN: CHERAM

DOCUMENT TYPE: Journal

LANGUAGE: German

GI For diagram(s), see printed CA Issue.

AB The mesylate I (R - MeSO3, RI - NHAC) underwent inversion with AcONa in MeoCH2CH2OH to give II (R - OH), the mesylate II (R - MeSO3) of which was treated with NaN3 in Me2So to give the diazzide I (R - RI - NHAC) (III) of the desired sugar. Similar conversion succeeded with the azide I (R - RI - NHAC) (III) of the desired sugar. Similar conversion succeeded with the azide I (R - RI - NS) was hydrogenated to give the smine, which with HCl gave the hydrochloride I, 3HCl (R - RI - NHAC) (IV). Redn. and sapon. of III gave V. HCl (R - RI - NHAC), which was also obtained from IV. Hydrogenation of the benzoyl and acetyl deriv. of V in H2O-MeOH gave VI (R - Bz or Ac), resp. Catalytic hydrogenation of V. 4HCl (R - RI - NH2) (Fd/C, pH) 31 led probably to the pyrrolidine VII.4HCl [R - CI (OH) CH2NH2), from the mother liqs. of which a small ant. desired VI.4HCl (R - H) was obtained.

Page (Preparation); PREP (Preparation) (prepn. of) (pr

# 10007342Page 73 11/15/2002

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Examiner Anderson 703-605-1157

38.1% PROCESSED 1000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED) SEARCH TIME: 00.00.03

2 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 49448 TO 55592
PROJECTED ANSWERS: 2 TO 242

L2 2 SEA SSS SAM L1

=> s 11 full FULL SEARCH INITIATED 10:09:33 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 52960 TO ITERATE

100.0% PROCESSED 52960 ITERATIONS 157 ANSWERS SEARCH TIME: 00.00.09

L3 157 SEA SSS FUL L1

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COST IN U.S. DOLLARS

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ENTRY SESSION
FULL ESTIMATED COST

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140.49

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SINCE FILE TOTAL

FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 13 NOV 2002 HIGHEST RN 473527-47-8 DICTIONARY FILE UPDATES: 13 NOV 2002 HIGHEST RN 473527-47-8

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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L5 STRUCTURE UPLOADED

=> d

L5 HAS NO ANSWERS

L5 ST

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

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=> s 15 subset=13 full FULL SUBSET SEARCH INITIATED 10:10:41 FILE 'REGISTRY' FULL SUBSET SCREEN SEARCH COMPLETED - 157 TO ITERATE

100.0% PROCESSED 157 ITERATIONS 41 ANSWERS SEARCH TIME: 00.00.11

L6 41 SEA SUB=L3 SSS FUL L5

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FILE COVERS 1907 - 15 Nov 2002 VOL 137 ISS 21 FILE LAST UPDATED: 14 Nov 2002 (20021114/ED)

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CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> s 16 L7 10 L6

=> d ibib abs hitstr 1-10

## 10007342Page 6 11/15/2002

ACCESSION NUMBER: DOCUMENT NUMBER: TITLE:

AUTHOR (S):

ANSWER 1 OF 10 CAPLUS COPYRIGHT 2002 ACS
ESSION NUMBER: 2002:63161 CAPLUS
UMENT NUMBER: 156:355438
HOR (S): The first synthesis of kaitocephalin based on the structure revision
HOR (S): Watanabe, Hidenori, Okue, Masayuki; Kobayashi, Hiroyuki; Kitahara, Takeshi
PORATE SOURCE: Graduate School of Agricultural and Life Sciences, Department of Applied Biological Chemistry, The University of Tokyo, Bunkyo-ku, Tokyo, 113-8657, Japan Tetrahedron Letters (2002), 43(5), 861-864
CODEN: TELEAY, ISSN: O040-4039
Elsevier Science Ltd.
JURONT TYPE: Journal English
ENGS SOURCE(S): CASREACT 136:355438

SOURCE:

PUBLISHER: DOCUMENT TYPE: LANGUAGE:

CORPORATE SOURCE:

OTHER SOURCE(S): CASREACT 136:355438

A total synthesis of kaitocephalin (I), a glutamate receptor antagonist, was accomplished employing a novel stereoselective C-C bond forming reaction of a nitrone (II) and a halide (III) with zinc in aq. solvent under sonication as a key step. The abs. configuration of kaitocephalin was confirmed to be 2R, 35, 4R, 7R, 9S. 420107-69-39 420107-70-69
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (total synthesis of kaitocephalin via stereoselective reaction of a nitrone and a halide) 420107-69-3 CAPLUS 1,2-Pyrrolidinedicarboxylic acid, 5-[(2S)-2-[(3,5-dichloro-4-(phenylmethoxy)benzoyl] amino]-3-cxo-3-(phenylmethoxy)propyl]-2-[(1S,2S)-1,3-dihydroxy-2-[[(phenylmethoxy)carbonyl]amino]propyl]-,

L7 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2002 ACS (Continued) RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 1 OF 10 CAPLUS COPYRIGHT 2002 ACS (Continued) bis(phenylmethyl) ester, (2R,5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

420107-70-6 CAPLUS
2,5-Pyrrolidinedipropanoic acid, .alpha.5-[[3,5-dichloro-4-(phenylmethoxy)enzoy1]amino]-.beta.2-hydroxy-1,2bis[(phenylmethoxy)carbony1]-.alpha.2-[([phenylmethoxy)carbony1]amino]-,
.alpha.5-(phenylmethy1) ester, (.alpha.2R,.alpha.5S,.beta.25,2R,5R)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

REFERENCE COUNT:

THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS 16

L7 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2002:63160 CAPLUS DOCUMENT NUMBER: 137:6017

AUTHOR(S):

J37:6017

Synthesis of the proposed structure and revision of stereochemistry of kaitocephalin Okue, Masayukir, Kobayashi, Hiroyukir, Shin-ya, Kazuo, Furihata, Kazuo, Hayakawa, Yoichir, Seto, Haruor, Watanabe, Hidenorir, Kitahara, Takeshi Graduate School of Agricultural and Life Sciences, Department of Applied Biological Chemistry, The University of Tokyo, Yayoi, Bunkyo-ku, Tokyo, 113-8657, Japan

Tetrahedron Letters (2002), 43(5), 857-860

CODEN: TELEAY; ISSN: 0040-4039

Elsevier Science Ltd.

Journal
English

CASREACT 137:6017 CORPORATE SOURCE:

PUBLISHER:
DOCUMENT TYPE:
LANGUAGE:
OTHER SOURCE(S):
GI

A stereoselective total synthesis of the proposed structure of kaitocephalin was accomplished starting from L-proline and D- and L-serines. However, its 1H MMR spectral data and retention time on HPLC were not identical with those of authentic natural kaitocephalin. The revised stereochem. of natural kaitocephalin, (2R)-isomer I, was inferred from further expts. employing diastereomers and model compds.

433237-95-79 433238-69-89
RL: RCT (Reactant): SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis via a stereoselective coupling reaction of the proposed structure of kaitocephalin and revision of its stereochem.)
433237-95-7 CAPLUS
1,2-Pyrrolidinedicarboxylic acid, 5-[(2S)-2-[[3,5-dichloro-4-(phenylmethoxy)benzoyl]amino]-3-oxo-3-(phenylmethoxy)propyl]-2-[([shenylmethoxy)carbonyl]amino]-propyl]-,
1,3-dihydroxy-2-[([shenylmethoxy)carbonyl]amino]propyl]-,
1sis(phenylmethyl) ester, (2R,5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## 10007342Page 7 11/15/2002

#### L7 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2002 ACS (Continued)

433238-69-8 CAPLUS
2,5-Pyrrolidinediproponoic acid, .alpha.5-[[3,5-dichloro-4-(phenylmethoxy)benzoyl]amino]-.beta.2-hydroxy-1,2-bis[(phenylmethoxy)carbonyl]-.alpha.2-[[(phenylmethoxy)carbonyl]amino]-.alpha.5-(phenylmethyl) ester, (.alpha.25,.alpha.55,.beta.25,2R,5R)- (9CI) (CA INDEX NAME)

#### Absolute stereochemistry.

PAGE 2-A

REFERENCE COUNT:

THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

### ANSWER 3 OF 10 CAPLUS COPYRIGHT 2002 ACS (Continued)

372187-25-2 CAPLUS
1,2-Pyrrolidinedicarboxylic acid, 2-[(1S,2R)-2-[[(1,1-dimethylethoxylcarboxyl]amino]-3-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-1-hydroxyropyl]-5-(2-propenyl)-, 1-methyl 2-(phenylmethyl) ester, (2R,5R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

372187-50-3 CAPLUS
1,2-Pyrcolidinedicarboxylic acid, 2-[(15,2R)-2-[[(1,1-dimeth)2-thoxy)carbonyl]amino]-1,3-dihydroxypropyl]-5-(2-propenyl)-1-methyl 2-(phenylmethyl) ester, (2R,5R)- (9Cl) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 3 OF 10
ACCESSION NUMBER:
DOCUMENT NUMBER:
TITLE:
TOTAL Synthesis of Kaitocephalin, the First Naturally
Occurring AMPA/KA Receptor Antagonist

AUTHOR(S):
CORPORATE SOURCE:
State Key Laboratory of Bioorganic and Natural
Products Chemistry Shanghai Institute of Organic
Chemistry, Chinese Academy of Sciences, Shanghai,
20032, Peop. Rep. China
JOURDAI of the American Chemical Society (2001),
123(39), 9706-9707
CODEN: JACSAT, ISSN: 0002-7863
American Chemical Society
JOURNAI TYPE:
LANGUAGE:
American Chemical Society
JOURNAI COMMERS SOURCE(S):
CASREACT 135:357785

PUBLISHER: DOCUMENT TYPE: LANGUAGE: OTHER SOURCE(S): GI

The first total synthesis of kaitocephalin (I) includes a highly disastereoselective aldol reaction and various functional group manipulations involving internal protection and group selectivity. 372187-24-1P 372187-25-2P 372187-50-3P

372107-24-19 372107-25-29 372107-30-39
RL: RCT (Reactant): SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (total synthesis of kaitocephalin)
372107-24-1 CAPLUS
1,2-Pyrrolidinedicarboxylic acid, 2-[(1R,2R)-2-[[(1,1-dimethylethoxy)carbonyl]amino]-3-[[(1,1-dimethylethoxy)carbonyl]amino]-3-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-1-hydroxypropyl]-5-(2-propenyl)-, 1-methyl 2-(phenylmethyl) ester, (2R,5R)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

## L7 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2002 ACS (Continued)

REFERENCE COUNT:

22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

## 10007342Page 8 11/15/2002

L7 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:3489 CAPLUS
132:93658

INVENTOR(S): Preparation of amino acid and peptide derivatives as microbial efflux pump inhibitors.
Chamberland, Suzanner: Ishida, Yoheir Lee, Ving J., Leger, Roger, Nakayama, Kiyoshi; Ohta, Toshiharu; Ohtsuka, Masamir Renau, Thomas W.; Watkins, William J. Zhang, Zhijia J.
PATENT ASSIGNEE(S): Microcide Pharmaceutical For. Ltd.
POT Int. Appl., 387 pp.
CODEM: PIXMO2
DOCUMENT TYPE: Patent
English

FAMILY ACC. NUM. COUNT:

PATENT NO.				KIND DATE					APPLI	CATI	ON N	٥.	DATE					
WO 20	2000017	14	٠.		2000													
#U 20	,00001	14		1	2000	0113		,	WO 19	99-U	5148	71	19990629					
•	: AE,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB	, BG,	BR,	BY.	CA.	CH.	CN.	CU.	CZ.		
	DE,	DK,	EE,	ES,	FI.	GB.	GD.	GE	, GH,	GM.	HR.	HII	TD.	11.	TN	TS		
	JP.	KE.	KG.	KP.	KR.	K2	LC	1.1	, LR,	15	IT	111	11/	ŵō,	¥C,	15,		
	MN	MW	MY	NO.	MZ	DI.	D.T.	200	, 111,	CD,	ш,	щ,	ш,	AU,	MG,	mĸ,		
	ma.	,		,	142,	F 11,	F1,	AU,	, RU,	50,	SE,	56,	51,	SK,	SL,	TJ,		
	1M,	TK,	TT,	UΑ,	UG,	UZ,	VN,	YU,	, ZA,	ZΨ,	AM,	ΑZ,	BY,	KG,	KZ,	MD,		
		ΤJ,																
F	₹W: GH,	GM,	ΚE,	LS,	MW,	SD,	SL,	SZ	, UG,	ZW.	AT.	BE.	CH.	CY.	DE.	DK.		
	ES,	FI,	FR,	GB.	GR.	IE.	IT.	LU.	, MC,	NL.	PT.	SE.	RF.	B.T	CF.	CG		
	CI,	CM,	GA,	GN,	GW.	ML.	MR.	NE.	, SN,	TD.	TG	,	٠,	ы,	٠.,	co,		
US 63	199629								JS 19			6	1998	2701				
AU 99	52073		A.	1	2000	0124		,	AII 19	99-5	2073	•	1000	1620				
PRIORITY A	PPLN.	INFO	. •						1998-									
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									1998-									
							1	WO 1	1999-1	J5141	371	W	19990	1629				
OTHER SOUR	CE(S):			MAR	PAT :	132:9	365	В										
GT																		

A method for treating a microbial infection comprises administration of title compds. [I; Q1 = (CR2) n1; Q2 = (CH2) n2; Q3 = (CH2) n3; n1 = 0, 1; n2 = 0-3; n3 = 0-2; n1n4.7m3 = 1-4; X = N, CR2a, CR2b; R2a = H, alkyl; R2b = OH, F; Y = bond, S, O, NR23; R23 = H, alkyl; R1, R2 = H, C(:NR) R^\*,

L7 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1997:504115 CAPLUS DOCUMENT NUMBER: 127:217660

DOCUMENT NUMBER: TITLE:

127:217660

1.beta.-Methyl-2-(5-substituted pyrrolidin-3ylthioloarbapenems; 3. Synthesis and antibacterial
activity of BO-2727 and its related compounds
Ohtake, Norikazu; Okamoto, Osamu; Mitomo, Ryuji; Kato,
Yoshiaki; Yamamoto, Katsumi; Haga, Yuji; Fukatsu,
Hiroshi; Nakagawa, Susumi
Tsukuba Res. Inst., Banyu Pharmaceutical Co., Ltd.,
Tsukuba, 300-26, Japan Journal of Antibiotics (1997), 50(7), 598-613
CODEN: JANTAJ; ISSN: 0021-8820
Japan Antibiotics Research Association
Journal AUTHOR(S):

CORPORATE SOURCE:

SOURCE:

PUBLISHER: DOCUMENT TYPE: LANGUAGE: GI

English

The synthesis and biol. activity of (1R,5S,6S)-2-[(3S,5S)-5-substituted pyrrolidin-3-ylthio]-6-[(R)-1-hydroxyethyl]-1-methyl-1-carbapen-2-em-3-carboxylic acid in which hydroxy-substituted aminoethyl, aminopropyl, and aminobutyl groups were introduced as substitutents, are described. These derivs. showed potent antibacterial activity against Gram-pos. and Gram-neps. bacteria including P. aeruginosa. Among them, lenapenem (1; BO-2727), carrying an (R)-1-hydroxy-3-(N-methylamino)propyl group, was selected as a development candidate. 194994-07-75 194994-08-79 194994-11-19 194994-13-3P 194994-35-9P

194994-35-9P
RL: PRP (Properties); PUR (Purification or recovery); RCT (Reactant); SPN
(Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis and antibacterial activity of 80-2727 and its related
1.beta.-methyl-2-(S-substituted pyrrolidin-3-ylthio) carbapenems)
194994-07-5 CAPIUS
1-Pyrrolidinearboxylic acid, 4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2[1-hydroxy-2-[[[(4-nitrophenyl)methoxy]carbonyl]amino]ethyl]-,
1,1-dimethylethyl ester, [25-[2.alpha.(S\*),4.beta.]]- (9CI) (CA INDEX
NAME)

Absolute stereochemistry.

L7 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2002 ACS (Continued) C(:NR)NR'R'', etc.; R, R', R'' = H, alkyl; Z = bond, (CHR4)nCONR4, Q, etc.; R4 = H, alkyl; aralkyl; n = 0-3; A = bond, (CHR5)nXi(CHR5)nXi = 0, S, bond, cycloalkylene, heterocycloalkylene; R5 = H, alkyl; R3 = H, (substituted) aryl, tetrahydronaphthyl, indanyl, thienyl, furyl, pyridyl, quinolyl, cycloalkyl, etc.; with provisos]. Thus, 1-(trans-4-aminomethyl-L-prolyl)-4-(3-chloro-2-methylphenyl)piperazine (soln. phase prepn. given) at 2.5 mus/ml together with levofloxacin 0.25 mus/ml gave 100% inhibition of Pseudomonas aeruginosa PAM1001 growth. 254883-57-3P

RE: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation) of amino acid and peptide derivs. as microbial efflux pump inhibitors)

254883-57-3 CAPLUS

2-1-Pycrolidinecarboxylic acid, 4-([1,1'-biphenyl]-3-vloxy)-2-[2-ff(1.1-dimethylethoxy)carbonyl]amino]-1-hydroxyethyl]-, 1,1-dimethylethyl ester, (25,4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

5

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 5 OF 10 CAPLUS COPYRIGHT 2002 ACS (Continued)

$$\begin{array}{c} \text{OBU-t} \\ \text{OH} \\ \text{NO2} \\ \text{T-Bu} \\ \end{array}$$

L-Pyrtolidinecarboxylic acid, 4-[[(1,1-dimethylethyl)dimethylsilyl)oxy]-2-[1-hydcoxy-2-[[[(4-nitrophenyl)methoxy]carbonyl]amino]ethyl]-, 1,1-dimethylethyl ester, [2S-[2.alpha.(R\*),4.beta.]]- (9CI) (CA INDEX NAME) 194994-08-6 CAPLUS

Absolute stereochemistry.

194994-09-7 CAPLUS
1-Pyrcolidinecarboxylic acid, 4-hydroxy-2-[1-hydroxy-2-[[[{4-nitrophenyl]methoxy]carbonyl]amino]ethyl]-, (4-nitrophenyl)methyl ester,
[2S-[2.alpha.(R\*),4.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

194994-10-0 CAPLUS
1-Pyrrolidinecarboxylic acid, 4-hydroxy-2-[1-hydroxy-2-[[{(4-nitrophenyl)methoxy|carbonyl]amino]ethyl]-, (4-nitrophenyl)methyl ester,
[28-[2.alpha.(5\*),4.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

### 10007342Page 9 11/15/2002

## L7 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2002 ACS (Continued)

194994-11-1 CAPLUS
1-Pyrrolidinecarhoxylic acid, 4-(scetylthio)-2 [1 hydroxy 2 [[[(4-nitrophenyl)methoxy|carbonyl]amino]ethyl]-, (4-nitrophenyl)methyl ester, [2S-[2.alpha.(S\*),4.alpha.]]- [9CI] (CA INDEX NAME)

#### Absolute stereochemistry.

194994-13-3 CAPLUS
1-Pytrolidinecarboxylic acid, 4-(acetylthio)-2-[1-hydroxy-2-[[[(4-nitrophenyl)methoxy]carbonyl]mino]ethyl]-, (4-nitrophenyl)methyl ester, [2S-[2.alpha.(R\*),4.alpha.]]- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

#### 194994-35-9 CAPLUS

L7 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1994:298360 CAPLUS
DOCUMENT NUMBER: 120:298360 TRILLINGUAGE
INVENTOR(S): Preparation of Carbapenem derivatives as medical bactericides
NAKagawa, Susumm; Octake, Kenich; Nakano, Fumio; Yamada, Koji; Ushijima, Ryosuke; Murase, Satoshi; Fukatsu, Hicoshi
Banyu Pharma Co Ltd, Japan
Jpn. Kokai Tokkyo Koho, 51 pp.
CODEM: JOXCAF
Patent
LANGUAGE: Japanese

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. APPLICATION NO. A2 19930907 MARPAT 120:298360 JP 05230063 OTHER SOURCE(S): JP 1992-72633 19920221

(CH2) b

The title compds I [R1 = H, Me; R2 = H, neg. charge; X = NR3, RiIR10N+; R3 = H, alkyl, alkylsulfonyl, etc.; R10, R11 = alkyl, alkylsulfonyl, etc.; Y = NR18, R19R20N+; R18 = H, alkyl, actoimidoyl, etc.; R19, R20 = as defined above for R10, R11; W = H, alkyl, COZR23, etc.; R23 = H, alkyl; Z = S, O, etc.; a, b, c, d = 0 - 3] were prepd. Carbapenem II [prepd. from p-nitrobenayl (1R, S5, 6S); 2-diphenoxyphosphoryloxy-6-[(1R, -1-hydroxyethyl]-1-methyl-1-carbapen-2-em-3-carboxylate) in vitro showed MIC values of 1.56 and 3.13, mu.g/mb. against Pseudomonas aeruginosa MB 5002 and Pseudomonas aeruginosa MB 5108, resp., vs. MIC values of 1.56 and 12.5 mu.g/mb. resp., for imipenem. 154577-59-Op 154577-60-3p MR.; RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preph. and reaction of, in preph. of bactericides) 1-Fyrrolidinecarboxylic acid, 2-[2-[(chloroacetyl)amino]-1-hydroxyethyl]-4-[((1,1-dimethylethyl)dimethylsilyl)oxy]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Examiner Anderson 703-605-1157

AMSVER 5 OF 10 CAPLUS COPYRIGHT 2002 ACS (Continued)
1-Azabicyclo[3.2.0]hept-2-ene-2-carboxylic acid, 6-(1-hydroxyethyl)-3-[[5-[1-hydroxy-2-[[(4-nitrophenyl) methoxyl carbonyl] amino]ethyl]-1-[[(4-nitrophenyl) methoxyl carbonyl]-3-pyrrolidinyl|thio]-4-methyl-7-cxc-,
[4-nitrophenyl]methyl ester, [4R-[3[35\*,55\*(R\*]],4.alpha.,5.beta.,6.beta.[R\*])]- (GA INDEX NAME)

#### Absolute stereochemistry.

### L7 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2002 ACS (Continued)

154577-60-3 CAPLUS
1-Pytrolidinecarboxylic acid, 2-[2-[{ (acetylthio) acetyl] amino] -1-hydroxyethyl]-4-[{1,1-dimethylethyl|dimethylpilyl]oxy]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

## 10007342Page 10 11/15/2002

L7 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 1993:559977 CAPLUS DOCUMENT NUMBER: 119:159977 ITILE: AMAGINA SULUMINI KATO, NAKAGRAY, SULUMINI KATO,

119:159977
Aminoalkylpyrcolidinylthiocarbapenem derivatives
Nakagawa, Susumur Kato, Shinji; Murase, Satoshi;
Okamoto, Osamur Mitomo, Ryuji; Muramoto, Katsumi;
Yamada, Koji; Fukatsu, Hiroshi
Banyu Pharmaceutical Co., Ltd., Japan
Eur. Pat. Appl., 161 pp.
CODEN: EPXXDW
Patent
English
1

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE:

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:			
PATENT NO.	KIND DATE	APPLICATION NO.	DATE
EP 545290		EP 1992-120226	10001106
EP 545290	B1 20000823	EF 1992-120226	19921126
R: AT, BE.	CH. DE. DK. ES.	FR, GB, GR, IE, IT, LI	10 MC NI DE CE
AU 9229632	A1 19930603	AU 1992-29632	, 10, MC, NL, PT, SE
	B2 19940721	NO 1552-25052	19921125
WO 9311128	A1 19930610	WO 1992-JP1544	10021126
W: BG, BR,	CS, FI, HU, KR,	NO. Pr. RO RU	13921126
HII 64345	A2 10021220	TEL 1003 0130	10021126
AT 195736	E 20000915	AT 1992-120226 ZA 1992-9222 CA 1992-2083980 CN 1992-114620 JP 1992-341558	10031126
ZA 9209222	A 19930524	7A 1992-9222	10021120
CA 2083980	AA 19930528	CA 1992-2093090	10021127
CN 1073176	A 19930616	CN 1992-114620	10021127
CN 1032061	B 19960619	OH 1332 114020	13321127
JP 06097858	A2 19940329	JP 1992-341550	10021127
NO 9302685	A 19930727	NO 1993-2685	10030726
US 5550121	A 19960827	115 1004-312610	19940027
AU 9475894	A1 19950127		19941018
AU 667786	B2 19960404	110 1331 10031	23341016
PRIORITY APPLN. INFO.		JP 1991-335888 A	10011127
		JP 1992-215613 A	
		WO 1992-JP1544 W	10021126
		US 1992-982585 R1	10021127
OTHER SOURCE(S):	MARPAT 119:1	59977	17721161
GI			

L7 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2002 ACS (Continued)

149812-49-7 CAPLUS
1-Azabicyclo[3.2.0]hept-2-ene-2-carboxylic acid, 6-(1-hydroxyethyl)-3-[5-[1-hydroxy-2-[methyl][(4-nitrophenyl)methoxy]carbonyl]amino]ethyl]-1-[[(4-nitrophenyl)methoxy]carbonyl]-3-pyrcolidinyl]hio]-4-methyl-7-oxo-, (4-nitrophenyl)methyl ester, [4R-[3[3S\*,5S\*(S\*)],4.alpha.,5.beta.,6.beta.(R\*)]]- (9CI) (CA INDEX NAME)

PAGE 1-A

L7 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2002 ACS (Continued)

Title compds. I [R = H, Mer Rl = H, neg. charge: R2 = amino, quaternary ammonium: A = (un)substituted alkylene] were prepd. Thus, carbapenem II was obtained by treating the protected carbapenem di-Ph phosphate with the protected thiol, sepg. the diastereomers, and deblocking. II had min. inhibitory concns. against Pseudomonas aeruginosa MB5002 of 0.78.mu.g/ml, cf. imipenem 1.56.mu.g/ml, ef. imipenem 1.56.mu.g/ml-71.79 [49813-42-49-7] [49813-45-7] [49813-49-7] [49813-49-7] [49813-45-7] [49813-45-7] [49813-46

L7 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2002 ACS (Continued)

149813-12-7 CAPLUS
1-Pyrrolidinecarboxylic acid, 2-[2-[{(1,1-dimethylethoxy)carbonyl]amino]-1-hydroxyethyl-4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-,
1,1-dimethylethyl ester, [2S-[2.alpha.(R\*),4.beta.]]- (9CI) (CA INDEX MAME)

Absolute stereochemistry.

149813-13-8 CAPLUS
1-Pyrrolidinecarboxylic acid, 2-[2-[[[1,1-dimethylethoxy]carbonyl]amino]-1-hydroxytehyl-4-[[(1,1-dimethylethyl)dimethyl=11]yl]oxyl-,
1,1-dimethylethyl ester, [25-[2.alpha.(5\*),4.beta.]]- (9CI) (CA INDEX

Absolute stereochemistry.

149813-14-9 CAPLUS
1-Pytrolidinecarboxylic acid, 4-hydroxy-2-[1-hydroxy-2-[[(2-propenyloxy)carbonyl]amino]ethyl]-, 2-propenyl ester, [2S-[2.alpha.(R\*),4.beta.]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

### 10007342Page 11 11/15/2002

L7 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2002 ACS (Continued)

149813-15-0 CAPLUS
1-Pyrrolidinecarboxylic acid, 4-hydroxy-2-[[-hydroxy-2-[[(2-propenyloxy)carbonyl]amino]ethyl]-, 2-propenyl ester, [2s-[2.alpha.(5\*),4.beta.]]- (9CI) (CA INDEX NAME)

#### Absolute stereochemistry.

149813-16-1 CAPLUS
1-Pyrrolidinecarboxylic acid, 4-(acetylthio)-2-[1-hydroxy-2-[[(2-propenyloxy)carbonyl]amino]ethyl]-, 2-propenyl ester, [25-[2.alpha.(R\*),4.alpha.]]- (9CI) (CA INDEX NAME)

#### Absolute stereochemistry.

149813-17-2 CAPLUS
1-Pyrrolidinecarboxylic acid, 4-(acetylthio)-2-[1-hydroxy-2-[[(2-propenyloxy)carbonyl)amino]ethyl]-, 2-propenyl ester, [2s-[2.alpha.(S\*),4.alpha.]]- (9CI) (CA INDEX NAME)

#### Absolute stereochemistry.

#### L7 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2002 ACS (Continued)

### Absolute stereochemistry.

$$\begin{array}{c|c} c_2N & & c_2N \\ \hline & O & Me \\ \hline & N & S \\ \hline & R & N \\ \hline & H & O \\ \end{array}$$

149813-49-0 CAPLUS
1-Pytrolidinecarboxylic acid, 4-(acetylthio)-2-[1-hydroxy-2-[methyl[[(4-nitrophenyl)methoxy]carbonyl]amino]ethyl]-, (4-nitrophenyl)methyl ester, [25-[2.alpha.(5\*),4.alpha.]]- [9CI) (CA INDEX NAME)

#### Absolute stereochemistry.

149882-32-6 CAPLUS
1-Azabicyclo[3.2.0]hept-2-ene-2-carboxylic acid, 6-(1-hydroxyethyl)-3-[[5[1-hydroxy-2-[[(2-propenyloxy)carbonyl]amino]ethyl]-1-[(2propenyloxy)carbonyl]-3-pyrrolidinyl]thio]-4-methyl-7-oxo-, 2-propenyl
action (4R-[3]38\*,55\*(8\*)],4.alpha.,5.beta.,6.beta.(R\*)]]- (9CI) (CA
INDEX NAME)

Examiner Anderson 703-605-1157

#### L7 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2002 ACS (Continued)

149813-45-6 CAPLUS
1-Pyrrolidinecarboxylic acid, 4-hydroxy-2-[1-hydroxy-2-[methyl[[(4-nitrophenyl)methoxy]carbonyl]anino]ethyl]-, (4-nitrophenyl)methyl ester, [2S-[2.alpha.(R\*),4.beta.]]- (9CI) (CA INDEX NAME)

#### Absolute stereochemistry.

149813-46-7 CAPLUS
1-Pyrrolidinecarboxylic acid, 4-(acetylthio)-2-[1-hydroxy-2-[methyl][(4-nitrophenyl)methoxy]carbonyl]amino]ethyl]-, (4-nitrophenyl)methyl ester, [25-[2.alpha.(R\*),4.alpha.]]- (9CI) (CA INDEX NAME)

#### Absolute stereochemistry.

149813-48-9 CAPLUS
1-Pyrrolidinecarboxylic acid, 4-hydroxy-2-[1-hydroxy-2-[methyl[[{4-nitrophenyl}]methoxy]carbonyl]amino]ethyl]-, (4-nitrophenyl)methoxylcarbonyl]amino]ethyl]-, (4-nitrophenyl)methyl ester, [28-[2.alpha.(5\*),4.beta.]]- (9CI) (CA INDEX NAME)

### L7 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2002 ACS (Continued)

149982-34-8 CAPLUS
1-Azabicyclo[3.2.0]hept-2-ene-2-carboxylic acid, 6-(1-hydroxyethyl)-3-[[5-l-hydroxy-2-fmethyl][(4-nitrophenyl)methoxy]carbonyl]amino]ethyl]-1-[[(4-nitrophenyl)methoxy]carbonyl]-3-pyrcolidinyl]thio]-4-methyl-7-oxo-, (4-nitrophenyl)methyl ester, [4A-[3[38\*,55\*(8\*)],4.alpha.,5.beta.,6.beta.(R\*)]]- (9CI) (CA INDEX NAME)

### PAGE 1-A

## 10007342Page 12 11/15/2002

L7 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:21037 CAPLUS
TITLE: 1992:21037 CAPLUS
100:21037
Preparation of tricyclic [6.5.5]/[6.6.5]-fused
owazolidinone antibacterial agents
Brickner, Steven Joseph
PATENT ASSIGNEE(S): Uplohn Co., USA
SOURCE: UPlohn Co., USA
PCT Int. Appl., 61 pp.
COURN: PIXXOZ
PATENT ASSIGNEE S: PATENT FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. WO 9107409 LU, CA 2066191 AU 9067246 AU 630768 EP 500686 EP 500686 R: AT, JP 05501553 JP 2994459 AT 133417 US 5231188 AT 1990-916933 US 1992-882407 US 1993-6596 US 1989-438759 US 1990-553795 WO 1990-US6220 19901102 19920513 19930121 19891117 19900713 19901102 19920513 19930727 US 5247090 PRIORITY APPLN. INFO.: 19930921

MARPAT 116:21037

1992-882407

L7 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2002 ACS (Continued) Relative stereochemistry.

OTHER SOURCE(S):

135829-13-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and redn. of, in prepn. of tricyclic antibacterial)
135829-13-9 CAPLUS
1H-Indole-1-carboxylic acid, 2-[2-(acetylamino)-1-hydroxyethyl]-2,3-dihydro-, phenylmethyl ester, (R\*,S\*)- (SCI) (CA INDEX NAME)

Relative stereochemistry.

L7 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2002 ACS (Continued)

Title compds. for ex: I [R] = H, (chloro)alkyl, cycloalkyl, alkenyl, (substituted) Ph, heterocyclyl, alkoxy, (substituted) amino, HOCH2, alkoxymethyl, alkylcarbonylmethyl; R2, R4 = H, HO, halo, alkylcarbonyloxy, PhCO2; R3 = H, halo, HoO, Eto, (substituted) alkylcarbonyl, PhCH2COH2CO, N3CH2CO, HON:CMe, MeSO2, PhSO2, MeSO, PhSO, etc.; R5 = CO, (CH,H), (OH, Me), (H, alkyl, halo, double bond with R6), etc.; R6 = H, null) and salts thereof, useful as antibacterial agents (no data), are prepd. AlCl3 in CH2C12 was couled and ClCH2COC1 was added dropwise followed by (H,S9aS)-N-[(9,9a-di)Aydro-3-oxo-1H,3H-oxazolo(3,4-a]indol-1-yllmethyl]acetamide (prepn. starting from Et indole-2-carboxylate given) in CH2C12, to give after work-up the (1S,9aS)-acetamide II.
133629-09-3P

135629-09-3P
REL: RCT (Reactant); SFN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. and acetylation of, in prepn. of tricyclic antibacterial) 135629-09-3 CAPIUS
HH-Indole-1-carboxylic acid, 2-[2-(acetylamino)-1-hydroxyethyl)-2,3-dihydro-, phenylmethyl ester, (R\*,R\*)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

ΙT 135854-81-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and cyclization of, in prepn. of antibacterial)
135854-81-8 CAPLUS

1H-Indole-1-carbonyl chloride, 2-[2-(acetylamino)-1-hydroxyethyl]-2,3-dihydro-, (R\*,S\*)- (9CI) (CA INDEX NAME)

ACCESSION NUMBER: 1989:595413 CAPLUS COCUMENT NUMBER: 1989:595413 CAPLUS COCUMENT NUMBER: 111:1958-13 PROPERTY. 111:195413
Preparation of renin inhibitory peptides containing
1-amino-2-hydroxy-2-heterocyclyl moiety
Gammil, Ronald B.; Sawyer, Tomi K.
Upjohn Co., USA
PCT Int. Appl., 74 pp.
CODEN: PIXXO2
Patent INVENTOR (S): PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: English 1 FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PA	TENT NO.	KIND	DATE	APPLICATION NO.	DATE
140	8903842				
•0		A1	19890505	WO 1988-US3274	19880926
	W: AU,				
	RW: AT,	BE, CH, DE	, FR, GB,	IT, LU, NL, SE	
AU	8825415	A1	19890523	AU 1988-25415	19880926
ΑU	619222	B2	19920123		
EP	395664	A1	19901107	EP 1988-909067	19880926
	R: AT,		FR, GB,	IT, LI, LU, NL, SE	
	03500772	T2	19910221	JP 1988-508337	19880926
	9000977	A	19900419	DK 1990-977	19900419
	9001771	A	19900420	NO 1990-1771	19900420
	5132400	A	19920721	US 1990-511273	19900420
PRIORITY	APPLN.	INFO.:		US 1987-111847	19871021
				WO 1988-US3274	19880926

PRIORITY APPLM. INFO: US 1987-111847 19871021

OTHER SOURCE(S): MARPAT 111:195413

For diagram(s), see printed CA Issue.

The title compds., conty. the moiety Q (\* indicates asym. C; R90, R91 = H, alkyl, aralkyl, heterocyclylakyl, cycloalkylakyl, adamantyl: CR100R101 = heterocyclyl: R102 = H, alkyl, aralkyl, heterocyclylakyl, cycloalkylakyl, etc.; n = 0, 1-5 integer], useful as reni ninhibitors (no data), are prepd. Peptide I (R = CR20Ph, R1 = CO2CH2Ph), prepd. in many steps from protected phenylalaninal II, pyrrolidineformamidine III, BOC-His(.pi.BOM)-OH (BOC = Me3CO2C, BOM = CH2OCH2Ph), and Ac-Trp(Nin-CH0)Pro-Phe-OH, was deprotected with HF-anisole to give I (R = R1 = H).

R1 = H).

R1: RC (Reactant) SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant) or reagent) (prepn. and reaction of, in prepn. of renin inhibiting peptides)
N1 123337-17-7 CAPIUS
N1 -Pyrrolidinecarbowylic acid, 2-[3-cyclohexyl-2-[{1, 1-dimethylethoxyl carbonyl] amino]-1-hydroxypropyl]-, phenylmethyl ester, [2R-[2R\*(IS\*,2S\*\*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

### 10007342Page 13 11/15/2002

## L7 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2002 ACS (Continued)

123337-19-9 CAPLUS
1-Pyrcolidinecarboxylic acid, 2-[3-cyclohexyl-2-[[2-[[(1,1-dimethylethoxy)carbonyl]mino]-1-oxo-3-[1-[(phenylmethoxy)methyl]-1H-imidsol-4-yllpropyl]amino]-1-hydroxyropylj, phenylmethyl ester, [2R-[2R\*[15\*,25\*(5\*)]]]- (9CI) (CA INDEX NAME)

#### Absolute stereochemistry.

123337-20-2 CAPLUS
L-HistIdinamide, N-acetyl-1-formyl-L-tryptophyl-L-prolyl-L-phenylalanyl-N[l-(cyclohexylmethyl)-2-hydroxy-2-[l-[(phenylmethoxy)carbonyl]-2pyrrolidinyl]ethyl]-1-[(phenylmethoxy)methyl]-, {2R-[2R\*(15\*,2S\*)]}- (9CI)
(CA INDEX NAME)

## L7 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2002 ACS (Continued)

123409-19-8 CAPLUS
1-Pyrrolidinecarboxylic acid, 2-[3-cyclohexyl-2-[[2-[[(1,1-dimethylethoxy)carboxyl]amino]-1-oxo-3-[1-[(phenylmethoxy)methyl]-1H-imidazol-4-yl]proxyl]amino]-1-hydroxyproxyl]-, phenylmethyl ester, [25-[2R\*[15\*,2R\*(R\*)]]- (9CI) (CA INDEX NAME)

### Absolute stereochemistry.

123409-20-1 CAPLUS
L-Histidinamide, N-acetyl-1-formyl-L-tryptophyl-L-prolyl-L-phenylalanyl-N[1-(cyclohexylmethyl)-2-hydroxy-2-[1-[(phenylmethoxy)carbonyl]-2pyrrolidinyl]ethyl]-1-[(phenylmethoxy)methyl]-, [2S-[2R\*(1R\*,2S\*)]]- (9CI)
(CA INDEX NAME)

#### L7 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2002 ACS (Continued)

#### PAGE 1-A

PAGE 2-A

123409-17-6 CAPLUS
1-Pyrrolidinecarboxylic acid, 2-[3-cyclohexyl-2-[[(1,1-dimeth)elchoxy)carbonyl]amino]-1-hydroxypropyl], phenylmethyl ester, [25-[2R\*(15\*,2R\*)]]- (9CI) (CA INDEX NAME)

### L7 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2002 ACS (Continued)

### PAGE 1-A

PAGE 2-A

## 10007342Page 14 11/15/2002

L7 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1974:413723 CAPLUS
DID and polyamino sugars. XX. Synthesis of 2.3.4,6-tetraamino-2,3.4,6-tetradeoxy-D-glucose
AUTHOR(S): Meyer zu Reckendorf, Wolfgang; Wassiliadou-Micheli, Niobe
CORPORATE SOURCE: Inst. Pharm. Chem., Univ. Muenster, Muenster, Ger.
SOURCE: Chem. Ber. (1974), 107(4), 1188-94
CODEN: CHERAM
JOURNAI
LANGUAGE: German
GI For diagram(s), see printed CA Issue.
AB The mesylate I (R - MeSO3, Rl - NHAC) underwent inversion with AcONa in MeCAICCH2OH to give II (R - OH), the mesylate II (R - MeSO3) of which was treated with NaM3 in Me2SO to give the diazide I (R - N3, Rl - NHAC) (III) of the desired sugar. Similar ronversion acceeded with the saide I (R - MeSO3, Rl - NH), and the resulting tri-azide I (R - Rl - N3) was hydrogenated to give the amine, which with HCl gave the hydrochloride I.3HCl (R - Rl - NH2) (IV). Redn. and sapon. of III gave V.HCl (R - Rl - NH2), Vhich was also obtained from IV. Hydrogenation of the benzoyl and acetyl deriv. of V in H2O-MeOH gave VI (R - Bz or Ac), resp. Catalytic hydrogenation of V.4HCl (R - Rl - NH2) (Pd/C, pH 3) led probably to the pyrrolidine VII. 4HCl (R - Rl - NH2); from the mother liqs. of which a small amt. desired VI.4HCl (R - Rl + Was obtained.

IT S2897-79-3C CAPLUS
D-Glucottol, 2, 3,6-tris(benzoylamino)-1,4-(benzoylimino)-1,2,3,4,6-pentadeoxy- (9CI) (CA INDEX NAME)

## 10007342Page 15 11/15/2002

=> log y

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION 47.06 221.76 FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE CE FILE TOTAL
ENTRY SESSION
-6.20 -6.20 TOTAL

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# 10007342Page 2 11/15/2002

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FULL ESTIMATED COST

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TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

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Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

Uploading 10007342b.str

L1 STRUCTURE UPLOADED

=> d L1 HAS NO ANSWERS L1 STR

Examiner Anderson 703-605-1157

Structure attributes must be viewed using STN Express query preparation.

=> s 11

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SAMPLE SCREEN SEARCH COMPLETED - 35 TO ITERATE

100.0% PROCESSED 35 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.02

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 346 TO 1054 PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s 11 full

FULL SEARCH INITIATED 10:33:48 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 641 TO ITERATE

100.0% PROCESSED 641 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.04

L3 0 SEA SSS FUL L1

=>

Uploading 10007342b.str

L4 STRUCTURE UPLOADED

=> de

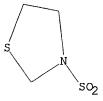
DE IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>).

=> d

L4 HAS NO ANSWERS

L4 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 14

SAMPLE SEARCH INITIATED 10:35:35 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 153 TO ITERATE

100.0% PROCESSED 153 ITERATIONS SEARCH TIME: 00.00.01

45 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS:

2318 TO 3802

PROJECTED ANSWERS:

498 TO 1302

L5

45 SEA SSS SAM L4

=> s 14 full

FULL SEARCH INITIATED 10:35:41 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 3436 TO ITERATE

100.0% PROCESSED 3436 ITERATIONS SEARCH TIME: 00.00.02

1129 ANSWERS

T.6

1129 SEA SSS FUL L4

=>

Uploading 10007342b.str

L7

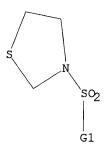
STRUCTURE UPLOADED

=> d

L7 HAS NO ANSWERS

L7

STR



G1 Cy,Ak

Examiner Anderson 703-605-1157

Structure attributes must be viewed using STN Express query preparation.

=> s 17 subset=16 full

FULL SUBSET SEARCH INITIATED 10:37:18 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED - 1129 TO ITERATE

100.0% PROCESSED 1129 ITERATIONS

1113 ANSWERS

SEARCH TIME: 00.00.01

L8 1113 SEA SUB=L6 SSS FUL L7

=>

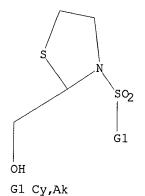
Uploading 10007342b.str

L9 STRUCTURE UPLOADED

=> d

L9 HAS NO ANSWERS

L9 STR



\_

Structure attributes must be viewed using STN Express query preparation.

=> s 19 subset=18 full

FULL SUBSET SEARCH INITIATED 10:38:11 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED - 39 TO ITERATE

100.0% PROCESSED 39 ITERATIONS

PERATIONS 27 ANSWERS

SEARCH TIME: 00.00.01

L10 27 SEA SUB=L8 SSS FUL L9

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE TOTAL

FULL ESTIMATED COST

ENTRY SESSION 348.94 349.15

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=> s 110 L11 5 L10

=> d ibib abs hitstr 1-5

### 10007342Page 7 11/15/2002

L11 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:784085 CAPLUS
DOCUMENT NUMBER: 132:18814
ITITLE: disorders and hair loss
INVENTOR(S): Hamilton, Gregory S., Norman, Mark H.; Wu, Yong-Qian;
Li, Jia-He; Steiner, Joseph P.
Guilford Pharmaceuticals Inc., USA; Amgen, Inc.
PATENT ASSIGNEE(S): PCT Int. Appl., 106 pp.
CODEN: PIXXO2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

72 20020618 JP 2000-552100 19981203 A 20010201 NO 2000-6117 20001201 11 20020418 US 2001-776994 20010206 US 1998-78439 P 19980603 US 1998-204238 A) 319981203 WO 1998-US25574 W 19981203

OTHER SOURCE(5):

The invention is directed to carboxylic acids and isosteres of heterocyclic ring compds. I [X, Y, Z = C, O, S, N (provided that not all X, Y, Z are C), n = 1-3: A = RIC(O)C(O), RIC(O)C(S), RISO2, (E) (RI)NC(O); RI, E = H, Cl-9 (un)branched alkyl or alkenyl, aryl, etc.; D = C-1O (un)branched alkyl, ethylene, butylene; R2 = carboxylic acid or carboxylic

L11 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2002 ACS

REFERENCE COUNT:

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2002 ACS (Continued) acid isostere) which have multiple heteroatoms within the heterocyclic ring, derivs. contg. N-linked diketos, sulfonamides, ureas and carbamates attached thereto, their prepn. and use for treating neurol. disorders including phys. damaged nerves and neurodegenerative diseases, as well as for treating alopecia and promoting have growth.

17 251953-45-4 251953-46-5 251953-47-6
R1: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Uses)
(Name 1 Captus (Uses)
(S1953-45-4 CAPLUS (Uses))
CN 2-Thiazolidinecatroxamide, N-methoxy-3-[(phenylmethyl)sulfonyl]-, (2S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry

251953-46-5 CAPLUS 2-Thiazolidinecarboxamide, N-ethoxy-3-{(1-phenylethyl)sulfonyl}-, (25)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

251953-47-6 CAPLUS 2-Thiazolidinecarboxamide, 3-[(4-methylphenyl)sulfonyl]-N-propoxy-, (2S)-(9CI) (СА ИМОЕХ МАМЕ)

Absolute stereochemistry

L11 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:113666 CAPLUS
DOCUMENT NUMBER: 1999:113666 CAPLUS
TITLE: Preparation of N-sulfonyl O-carbamoyltyrosine dipeptide derivatives and analogs as inhibitors of leukocyte adhesion mediated by VLA-4
Thorsett, Eugene D.; Semko, Christopher M.;
Sarantakis, Dimitriors; Pleiss, Michael A.; Kreft, Anthony; Konradi, Andrei W.; Grant, Francine S.; Dressen, Darren B.; Ashwell, Susan; Baudy, Reinhardt Bernhard; Lombardo, Louis John
Athena Neurosciences, Inc., USA; American Home
Products Corporation
PCT Int. Appl., 386 pp.
COORN: PIXXD2
Patent

DOCUMENT TYPE: Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATE	ΙT	INFO	ITAM	ON:															
	PA	TENT	NO.		KI	ND	DATE	;		A	PPLI	CATI	ON N	о.	DATE				
	WO	9906	390		A	1	1999	0211		W	0 19	98-U	\$153	24	1998	0731			
		w:	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,	
			DK,	EE,	ES,	FI,	GB,	GE,	GH,	GM,	HR.	HU.	ID.	IL.	IS.	JP.	KE.	KG.	
			KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK.	MN.	MW.	MX.	
			NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI.	SK.	SL.	TJ.	TM.	TR.	TT.	
			UA,	UG,	US,	US,	UZ,	VN,	YU,	ZW,	AM,	AZ,	BY.	KG.	KZ.	MD.	RU.	TJ.	TM
		RW:	GH,	GM,	KΕ,	LS,	MW,	SD,	SZ,	UG,	ZW,	AT.	BE.	CH.	CY.	DE.	DK.	ES.	
			FI,	FR,	GB,	GR,	IE,	İΤ,	LU,	MC,	NL,	PT,	SE.	BF.	ВJ,	CF.	CG.	CI.	
			CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD.	TG							
	ZA	9806	830		A		2000	0502		Z	A 19	98-6	830		1998	0730			
	ΑU	9885	849		A.	1	1999	0222		Al	J 19	98-8	5849		1998	0731			
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		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI.	LU.	NL.	SE.	MC.	PT.	
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	BR	9811	598		A		2000	1003		BI	19	98-1	1598		19980	3731			
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	het	eroc	yclyl	; R2	= H	l, ai	ny q	quo	R1;	R1R2	may	for	m (1	ın) ə	ubati	tute	d		

alkyl, (un)substituted aryl, (un)substituted cycloalkyl, (un)substituted heterocycly; R2 - H, any group R1; R1R2 May form (un)substituted heterocyclic ring; R3 - H, any group R1; R2R3 may form (un)substituted heterocyclic ring; R5 - (CH2)x-K-n-5; R5' - 02NR5R8', 02R12; R8, R8' - independently H, (un)substituted alkyl, (un)substituted cycloalkyl, (un)substituted heterocyclyl; Z - C0, (un)substituted heterocyclyl; Z - C0, S02; Ar - (un)substituted aryl or heteroaryl; x - 1-4; Q - C(X)NR7; R7 - H, alkyl; X - Q, 5; R6 - MH2; (un)substituted alkoy, (un)substituted cycloalkoxy, succinimidyloxy, admantylamino, beta-cholest-5-en-3-yloxy, NHCX; NHCK12pcO2Y, OCH2NR9R10; Y - H, (un)substituted alkyl, (un)substituted aryl, un)substituted cycloalkyl, (un)substituted cycloalkyl, (un)substituted aryl, (un)substituted salts thereof, with provisos] which bind VLA-4 (also referred to as

### 10007342Page 8 11/15/2002

L11 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2002 ACS (Continued)
integrin .alpha.4.beta.1 and COB9d/CD29). Certain of these compds. also
inhibit leukocyte adhesion and, in particular, leukocyte adhesion mediated
by VLA-4. Such compds. are useful in the treatment of inflammatory
diseases in a mammalian patient, e.g., human, wherein the disease may be,
for example, asthma, Alsheimer's disease, atherosclerosis, AIDS dementia,
diabetes, inflammatory bowel disease, theumatoid arthritis, tissue
transplantation, tumor metastasis and myocardial ischemia. The compds.
can also be administered for the treatment of inflammatory brain diseases
such as multiple sclerosis. Thus, carbamoylation of Ts-Pro-Tyr-Obt (Ts tosyl) with MeXNCOCl in the presence of ELN and DAMP gave 991 desired
title compd. Ts-Pro-Tyr(COMMe2)-Obt (I). Sapon. of I gave the
corresponding free acid Ts-Pro-Tyr(COMMe2)-OH. All prepd. compds. have
ICSO .ltoreq. 15 .mu.M in a VLA-4 binding assay.

IT 220547-47-TP 220547-46-0P 220547-56-0P
RL: BAC (Biological antivity or effector, except adverse); BCU (Biological
study, unclassified); SPN (Synthetic preparation); USES (Uses)
(prepn. of N-sulfonyl O-carbamoyltyrosine dipeptide derivs. and analogs
as inhibitors of leukocyte adhesion mediated by VLA-4)

RN 220547-47-7 CAPLUS

N-Tyrosine, N-[(12S)-3-[(4-fluorophenyl) sulfonyl]-2thiazolidinyl]carbonyl]-, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220547-48-8 CAPLUS L-Tyrosine, N-[((25)-3-[(4-fluorophenyl)sulfonyl)-2-thiazolidinyl]carbonyl]-, 1,1-dimethylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2002 ACS

220547-56-8 CAPLUS L-Tyrosine, N-[((2S)-3-[(4-fluorophenyl)sulfonyl)-2-thiazolidinyl[carbonyl]-, 1,1-dimethylethyl ester, hexahydro-4-methyl-1H-1,4-diazepine-1-carboxylate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220547-64-8 CAPLUS L-Tyrosine, N-[(1/25)-3-[(4-fluorophenyl)sulfonyl]-2-thiazolidinyl]carbonyl]-, hexahydro-4-methyl-1H-1,4-diazepine-1-carboxylate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2002 ACS (Continued)

220547-51-3 CAPLUS L-Tyrosine, N-[((25)-3-((4-fluorophenyl)sulfonyl]-2-thiazolidinyl]carbonyl]-, 4-(2-pyridinyl)-1-piperazinecarboxylate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

220547-53-5 CAPLUS
L-Tyrosine, N-[[(2S)-3-[(4-fluorophenyl)sulfonyl]-2thiszolidinyl]carbonyl]-, 1,1-dimethylethyl ester, 4-(2-pyridinyl)-1piperazinecarboxylate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L11 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2002 ACS

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

## 10007342Page 9 11/15/2002

L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:163570 CAPLUS
DOCUMENT NUMBER: 128:204898
TITLE: Prepn. of 1,3-diheterocyclic metalloprotease

Prepn. of 1,3-diheterocyclic metalloprotease inhibitors
Pikul, Stanislaw; McDow-Dunham, Kelly lynn; Almstead, Neil Gregory; De, Biswanath; Natchus, Michael George; Taiwo, Yetunde Olabisi
Procter (4 Gamble Company, USA PCT Int. Appl., 49 pp.
CODE: PIXXD2
Patent
English 1 INVENTOR (S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PA	TENT	NO.		KT	ND	DATE			A	PPLI	CATI	ON N	c.	DATE				
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		DK,	EE,	ES,	FI,	GB,	GE,	GH.	HU.	IL.	IS.	JP.	KE.	KG.	KP.	KB	K2.	
		LC,	LK,	LR,	LS,	LT,	LU,	LV.	MD.	MG.	MK.	MN.	MW.	MX.	NO.	N2	DI.	
		PT,	ĸo,	Rυ,	SD,	SE,	SG,	SI,	SK,	SL,	TJ.	TM.	TR.	TT,	UA.	UG.	UZ.	
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	1228	//1		A	- 3	1999(	0915		C7	199	7-1	9754	5	1997	1822	٠.,	12,	٠
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	9707€	593		A	1	9980	223		2.7	199	7-76	693	•	19970	1827			
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L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2002 ACS (Continued)

203915-77-9 CAPLUS 2-Thiazolidinecarboxamide, N-hydroxy-3-[(4-methoxyphenyl)sulfonyl]- (9CI) (CA INDEX NAME)

L11 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2002 ACS (Continued)

ANSWER 3 OF 5 CAPLUS COPYRIGHT 2002 ACS (Continued)

Prepn. is reported for (I; Rl = H; R2 = H, alkyl, acyl; Ar = COR3 (R3 = alkoxy, aryloxy, heteroaryloxy, etc.), SOZR4 (R4 = alkyl, heteroalkyl, aryl, etc.); X = O, S, SO, SOZ, NRS (R5 = H, alkyl, heteroalkyl, etc.); W = H, alkyl, heterocycle, etc.; Y = H, OH, SR10 (R10 = H, alkyl, aryl, heteroaryl); Z = nil, spirc moiety or oxo group substituted on heterocyclic ring; n = 1-4) or an optical isomer, diastereomer or enantiomer thereof, or a pharmaceutically-acceptable salt, or biohydrolyzable amide, ester, or imide thereof which are useful as inhibitors of metalloproteases. Thus, condensation of (CLC2MH2)2Me2 with p-Me0-CGH4SOZCI followed by cyclocondensation with BC(O)COZMe and amidation with KHH(OH) gives N-hydroxy-1,3-d-i[(4-methoxyphenyl) sulfonyl]-5,5-dimethylhexahydropyrimidine-2-carboxamide. Also disclosed are pharmaceutical comps. and methods of treating diseases, disorders and conditions characterized by metalloprotease activity using these compds. or the pharmaceutical compns. contp. them. Examples are given for treatment of rheumatoid arthritis, osteoarthritis, corneal abrasion and ulceration, chem. burns, asthma, premetastrit tumor, periodontitis, etc. Typically, for a human adult weighing apprixed, 70 kg., 5 - 3000 mg, more preferably 5 - 1000 mg, and more preferably 10 - 100 mg. of 1 are administered per day in pharmaceutical compns. for systemic administration.

203915-75-79 203915-76-89 203915-77-99

RL: BAC (Siological study); PREP (Preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of 1,3-diheterocyclic metalloprotease inhibitors and their (prepn. of 1,7-diheterocyclic metalloprotease inhibitors and their (prepn. of 7,7-7, CALUS)

203915-76-8 CAPLUS 2-Thiazolidinecarboxamide, N-hydroxy-3-[(4-methoxyphenyl)sulfonyl]-5,5-dimethyl- (9CI) (CA INDEX NAME)

L11 ANSWER 4 OF 5
ACCESSION NUMBER:
DOCUMENT NUMBER:
1996:620423 CAPLUS
126:8478
Synthesis, structural studies and antiretroviral evaluation of 3'-aza-4'-thia-2',3'-dideokynucleosides (thiazoldidine-nucleoside analogs)
AUTHOR(S):

Faury, Philipper Camplo, Michely Mourier, Nicolas;
Trabaud, Caroler, Niddam, Velerier Kraus, Jean-Louis
Faculte Sciences Luminy, Unite INSERM, Marseille,
1228, Fr.
Bulletin de la Societe Chimique de France (1996),
133(6), 553-561
CODEM: BSCFA5; ISSN: 0037-8968
Elsevier
DOCUMENT TYPE:
LANGUAGE:
GI

Starting with the concept that heterocyclic pseudo-ribose rings could confer potent antiviral activity to nucleoside analogs, we synthesized 3"-aza-4"-thia-2'.3"-dideoxynucleosides, e.g. I. The synthesis of such analogs required the prepn. of N-notected-1,3-thiazolidines adequately disubstituted in 2- and 5-position Introduction of nucleobases on these sugar-like thiazolidines was achieved through coupling reactions using tin(IV) chloride as a catalyst. The N-pretecting group (N-fluoroenylmethoxycarbonyl, N-acetyl and N-tosyl) of the thiazolidine ring is crucial for final deprotection of 3"-aza-4"-thia-2", 3"-dideoxynucleosides. None of these compds. were found active on 183477-89-69 183477-91-0P

183477-89-69 183477-91-0p
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified), SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and structural studies and antiretroviral evaluation of thiazolidine nucleoside analogs)
183477-89-6 CAPLUS
2-Thiazolidinemethanol, 5-(4-amino-2-oxo-1(2H)-pyrimidinyl)-3-[(4-methylphenyl)sulfonyl]-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

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L11 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2002 ACS (Continued)

183477-91-0 CAPLUS 2-Thiazolidinemethanol, 5-(4-amino-2-oxo-1(2H)-pyrimidinyl)-3-[(4-methylphenyl)sulfonyl]-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L11 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2002 ACS (Continued)

141985-37-7 CAPLUS
2,4-Thiazolidinedicarboxylic acid, 3-[[5-(dimethylamino)-l-naphthalenyl]sulfonyl]-5,5-dimethyl-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L11 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1992:422613 CAPLUS
DOCUMENT NUMBER: 1992:422613 CAPLUS
TITLE: Endogenous alkaloids in man. 12. Determination of 1,3-thiazolidinecarboxylic acids in urine by reversed-phase HPLC after fluorescence labeling with danayl chloride
Bringmann, G.; Feineis, D.; Hesselmann, Ch. Inst. Org. Chem., Univ. Wuerzburg, Destroug, Oermany
Analytical Letters (1992), 25(3), 497-512
CODEN: ANALBE; ISSN: 0003-2719
DOCUMENT TYPE: Journal Register of the detn. of highly polar alkaloid-type heterocycles and their precursors, L-cysteine, cystemine, and Di-j-peniciliamine, was developed, based on the prechromatog, derivatization of secondary mannes with danayl chloride to form yellow fluorescent compds. Series of tests, monitoring distereomerics 5,5-dimethyl-thiazolidine-2(R,S)-4(S)-dicarboxylic acids after danaylation in matrix-free soln, and in urine, resp., using an external std. method, are presented. The detection limit for urine samples was detd. to be 2-3
RL: PRP (Properties)
RN 14398-35-5 (ABLUS
CN 2,4-Thiazolidinedicarboxylic acid, 3-[[5-(dimethylamino)-1-naphthalexyl]sulfonyl]-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

141985-36-6 CAPLUS 2-Thiazolidinecarboxylic acid, 3-{{5-(dimethylamino)-1-naphthalenyl}sulfonyl}- (9CI) (CA INDEX NAME)

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COST IN U.S. DOLLARS

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE

TOTAL

SESSION
23.93
373.08

CA SUBSCRIBER PRICE ENTRY SESSION -3.10 -3.10

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